

MANUFACTURERS RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U. S. Patent Office.

VOL. LIX, No. 24.
WEEKLY.

BALTIMORE, JUNE 22, 1911

\$4.00 A YEAR.
(SINGLE COPIES, 15 CENTS.)

Manufacturers Record.

PUBLISHED EVERY THURSDAY BY THE
MANUFACTURERS RECORD PUBLISHING CO.
BALTIMORE.

RICHARD H. EDMONDS, President.
FRANK GOULD, Vice-President.
VICTOR H. POWER, Treasurer.
I. S. FIELD, Secretary.

RICHARD H. EDMONDS,
Editor and General Manager.

EDWARD INGLE, Managing Editor.

ALBERT PHENIS,
General Staff Correspondent.

Branch Offices:

New York—52 Broadway.
Boston—643 Old South Building.
Chicago—1116 Fisher Building.
St. Louis—543 Century Building.

Subscription, - - - - - \$4 a year
(payable in advance) to United States,
Mexico, Cuba, Porto Rico, Hawaii and the
Philippines.

To Foreign Countries (including Canada) in
the Postal Union, \$6.50 a year.

[Entered at the Baltimore Postoffice as sec-
ond-class matter.]

BALTIMORE, JUNE 22, 1911.

COTTON IN EXPORTS.

The value of exports of merchandise during the fiscal year ending with this month will be in the neighborhood of \$2,000,000,000, an increase of between \$200,000,000 and \$300,000,000 over the fiscal year ended June 30, 1910. Of this year's total, between \$600,000,000 and \$700,000,000, or something more than a third, will represent raw cotton, manufactured cotton and cottonseed and its products. During the 11 months ended with May of the present fiscal year exports of merchandise had a value of \$1,907,041,830, an increase over the same period in the last fiscal year of \$280,944,890. The increase in the value of raw cotton exports was more than half this total increase. Comparison of certain leading articles in the export trade for the 11 months in the fiscal years 1910 and 1911 is made in the following table:

Articles.	1910.	1911.
Breadstuffs.....	\$117,376,920	\$104,704,225
Meat and dairy.....	100,992,342	113,597,462
Cattle, hogs, etc.....	11,657,334	11,147,633
Cotton.....	427,110,591	572,907,935
Mineral oils.....	86,642,111	83,377,912
Total.....	\$743,779,208	\$885,734,267

Of the total of these five groups of articles, \$885,734,267, representing 46.4 per cent. of the value of all exports of merchandise in the 11 months, raw cotton represented \$572,907,935, or 64.7 per cent., and there would have been no increase for the five groups over 11 months ended with May, 1910, had it not been for cotton.

There was a decrease in breadstuffs from \$117,376,920 to \$104,704,225, or by \$12,672,695, equal to 10.8 per cent.; in mineral oils from \$86,642,111 to \$83,377,012, or by \$3,265,099, equal to 3.8

per cent., and in cattle, hogs and sheep from \$11,657,334 to \$11,147,633, or by \$509,701, equal to 4.3 per cent., a total decrease for the three groups of \$16,447,495. There was an increase in meat and dairy products from \$100,992,342 to \$113,597,462, or by \$12,605,120, equal to 12.4 per cent., not sufficient to counterbalance the aggregate decrease in the other three groups. But there was an increase in raw cotton from \$427,110,591 to \$572,907,935, or by \$145,797,434, equal to 34.1 per cent. This brought the total increase for the five groups from \$743,779,208 to \$885,734,267, or by \$141,955,059, equal to 19 per cent. It is interesting to note that while there was a decrease of 3.8 per cent. in the value of mineral oil exports, in spite of an increase of 1 per cent. in the quantity exported, from 1,340,235,139 to 1,354,849,130, or 14,613,991 gallons, the increase of 34.1 per cent. in the value of cotton exports was in the face of an increase of 29.6 per cent. in quantity, from 3,046,514,977 to 3,949,045,081, equal to 902,530,104 pounds.

SOUTHERN FACTORY PROGRESS.

Between 1904 and 1909 the capital invested in factories in the South, exclusive of Virginia and West Virginia, for which census returns have not yet been announced, increased from \$1,362,827,000 to \$2,036,049,000, or by \$673,222,000, equal to 49.4 per cent., and the value of factory products increased from \$1,540,078,000 to \$2,153,297,000, or by \$613,219,000, equal to 39.9 per cent. Two weeks ago the MANUFACTURERS RECORD published the figures for 10 Southern States and the District of Columbia, showing an increase in capital in the five years of 44.3 per cent. and in the value of products of 35.6 per cent. The figures for Tennessee and Texas, which have since been announced, account for the increases in these percentages of progress.

Between 1904 and 1909 the increases in Tennessee were from \$102,439,000 to \$167,924,000, or 64 per cent., in capital; from \$137,960,000 to \$180,130,000, or 31 per cent., in value of products, and from 60,572 to 73,841, or 20 per cent., in the average number of wage-earners. In Texas in the same period the increases were from \$115,665,000 to \$216,876,000, or 87 per cent., in capital; from \$150,528,000 to \$272,896,000, or 81 per cent., in the value of products, and from 49,966 to 70,229, or 43 per cent., in the average number of wage-earners. The capital invested in factories in the 12 Southern States and the District of Columbia in 1909 was \$1,067,582,000 greater than such capital in the whole South in 1900, and the value of factory products was \$913,552,000 greater than such value in the whole South in 1900.

TO TRAIN HIGHWAY ENGINEERS.

The founding of a splendidly-equipped roads material laboratory in connection with the engineering school of the University of Alabama has been

followed by announcement of the establishment at the university of a regular four-years' course leading to the degree of Bachelor of Science in Highway Engineering. Nowhere else in the country is there greater interest in the subject of improved highways than in the South, and hardly a State there is not occupied in comprehensive plans for good roads. As in the case elsewhere, this enthusiasm finds the South not thoroughly manned for the actual work of road construction upon the most economic basis. It has not a sufficient number of highway engineers trained to bring about the best and most lasting results from expenditures upon road work. The course offered by the University of Alabama is designed to meet that call.

INCREASING USE OF FERTILIZERS.

The increase in the value of farm products between 1889 and 1910 in Continental United States from \$4,717,070,000 to \$8,926,000,000 is to be accounted for to a large extent by the increased use of fertilizers in that period. The improved area in farms increased in 10 years from 414,500,000 acres to 470,000,000 acres, according to a conservative estimate. The increase in improved farm area in 35 States, two Territories and the District of Columbia, the ones so far reported by the census bureau, was from 311,408,000 acres to 359,574,000 acres, or 48,166,000 acres, equal to 15.5 per cent. In those same States the increase in expenditures for fertilizers was from \$28,648,000 to \$45,482,000, or \$16,834,000, equal to 58.8 per cent. Comparison of the figures in the censuses of 1900 and 1910 for these States is made in the following table:

Expenditures for Fertilizers.		
States.	1900.	1910.
Arizona.....	\$2,000	\$6,000
California.....	327,000	2,132,000
Colorado.....	23,000	58,000
Connecticut.....	1,078,000	1,930,000
Delaware.....	539,000	861,000
District of Columbia.....	23,000	16,000
Idaho.....	17,000	21,000
Illinois.....	831,000	571,000
Indiana.....	1,554,000	2,181,000
Iowa.....	337,000	107,000
Kansas.....	268,000	73,000
Louisiana.....	1,077,000	2,001,000
Maine.....	820,000	4,063,000
Massachusetts.....	2,619,000	3,375,000
Maryland.....	1,321,000	1,931,000
Michigan.....	492,000	936,000
Minnesota.....	251,000	63,000
Missouri.....	371,000	662,000
Montana.....	4,000	10,000
Nebraska.....	153,000	29,000
Nevada.....	8,000
New Hampshire.....	368,000	510,000
New Jersey.....	2,165,000	4,206,000
New Mexico.....	3,000	24,000
New York.....	4,493,000	7,057,000
North Dakota.....	14,000	9,000
Ohio.....	2,695,000	4,163,000
Oklahoma.....	26,000
Oregon.....	27,000	63,000
Pennsylvania.....	4,686,000	6,756,000
Rhode Island.....	264,000	309,000
South Dakota.....	13,000	11,000
Utah.....	14,000	19,000
Vermont.....	427,000	570,000
Washington.....	29,000	79,000
West Virginia.....	405,000	520,000
Wisconsin.....	294,000	121,000
Wyoming.....	13,000	5,000
Total.....	\$28,648,000	\$45,482,000

These figures do not include the expenditures in 11 Southern States not yet reported. Expenditures for fertilizers in those States in 1899, the year covered by the 1900 census, amounted to \$24,782,000, or 46.4 per cent. of the total

expenditures, \$53,430,000. If the increase in these Southern States was at the same rate as the increase in the rest of the country, the expenditures in 1909 amounted to \$38,470,000, making the total for the country \$83,952,000. It is believed, however, that the expenditures in these Southern States in the year covered by the last census will be found to be greater than the estimate. This is indicated by a comparison of the consumption of fertilizers in these 11 Southern States in 1901 and 1910, expressed in tons as follows:

States.	1901.	1910.
Virginia.....	200,000	346,555
North Carolina.....	285,578	619,915
South Carolina.....	293,000	721,500
Georgia.....	457,153	1,015,104
Florida.....	37,046	121,425
Alabama.....	191,583	401,692
Mississippi.....	66,173	131,526
Tennessee.....	40,048	55,900
Kentucky.....	40,000	45,000
Texas.....	10,500	34,300
Arkansas.....	15,000	27,000
Total.....	1,636,081	3,519,917

Between 1901 and 1910 the consumption in these 11 Southern States increased from 1,636,081 tons to 3,519,917 tons, or 1,883,836 tons, equal to 115.1 per cent.

Of the States and Territories so far reported decreases in expenditures for fertilizers appear only in the District of Columbia, Illinois, Iowa, Kansas, Minnesota, Nebraska, North Dakota, South Dakota, Wisconsin and Wyoming. In most of which comparatively little has ever been spent in any year for fertilizers.

Recognition of the wisdom of such expenditures is manifest in an increase in the six New England States from \$4,298,000 to \$9,313,000, or \$5,015,000, equal to 116.6 per cent., which, curiously enough, is about the rate of increase as that in the consumption of fertilizers in the 11 Southern States mentioned between 1901 and 1910. Again, the increase in California was from \$937,000 to \$2,132,000, or at the rate of 128 per cent.; in New Jersey from \$2,165,000 to \$4,206,000, or 94 per cent.; in Michigan from \$492,000 to \$936,000, or 90 per cent., and in Ohio from \$2,695,000 to \$4,163,000, or 54 per cent., showing that farmers in all parts of the country are alive to the importance of supplementing nature with the use of fertilizers as a means of getting the best returns from their land.

INCREASING SOUTHERN RAILROAD CAPACITY.

Over \$100,000,000 will be represented in the construction work now under way and projected by leading railroad systems of the South, without taking into consideration new lines to be built by new companies. A most gratifying characteristic of current news concerning railroads is the frequency of dispatches saying that important companies are energetically increasing the capacity of their lines by double-tracking and revising curves and grades. There is scarcely any line of prominence which is not engaged in this sort of work, and the announcement just made by the Louisville & Nashville Railroad of pro-

posed extensive improvements, the execution of which will cover a period of several years, and the general reconstruction and betterment work on the Baltimore & Ohio system, both of which were fully described in the MANUFACTURERS RECORD last week, are conspicuous examples of what progressive railroad companies are doing or have in view. Both of the roads mentioned are working along similar lines, namely, to not only provide additional trackage, but to increase the average trainload, the line improvement, in the case of the Baltimore & Ohio, including the provision of third track on busy divisions, and, in the case of the Louisville & Nashville, of double track. But the most important and impressive feature of the work to be done by the last-named company is the construction of an entirely new double-track railroad from a point near Nashville, Tenn., to Athens, Ala., about 110 miles, this being parallel to the existing line of the company, but some distance east of it and through a region where a practically level route can be obtained, one which will be of great advantage as compared with the present route that has some heavy grades.

The Atlantic Coast Line, which controls the Louisville & Nashville, is also engaged in double-tracking and other line improvement on various divisions of its busy system, and it recently joined with the Norfolk & Western Railway in the construction of the Winston-Salem Southbound, a new and heavily-built road about 90 miles long in North Carolina, which will be of great traffic advantage to both companies concerned. This close relationship with the Norfolk & Western suggests that it may be of great use to the Coast Line through either a trackage or a traffic arrangement to make a northern connection with the Louisville & Nashville, which is now directly connected with the Coast Line only at Montgomery, Ala., and River Junction, Fla., with an indirect connection in Atlanta. The Norfolk & Western touches the Louisville road in the southwestern part of Virginia, and the advantages of this connection are more apparent when it is remembered that the Louisville & Nashville is building to coal fields in Letcher county, Kentucky, as well as to other similar lands in Harlan county, near the Virginia border. Recently there have also been rumors that the Atlanta, Birmingham & Atlantic Railway, now in a receivership, might be acquired by the Louisville & Nashville and thus provide a connection at Birmingham and Atlanta, although the Coast Line reaches the latter via the Georgia Railroad. In fact, when considering the future of the Louisville & Nashville Railroad, taking into account the proposed work which will require five years to complete, it must never be forgotten that the Atlantic Coast Line controls it. This is apt to be overlooked, the Louisville & Nashville being so large a property, with a strong individuality, and was long independent. It goes without saying that two such large systems intimately related cannot remain almost altogether separate.

The Norfolk & Western must also be numbered among the railroads which are spending liberally to enhance their carrying capacity. It has some expensive construction in progress to revise curves and grades, and also frequently disburses largesums to add second track wherever it can be of direct advantage in facilitating traffic. Still another is the Chesapeake & Ohio, that is providing betterments of similar nature and

at the same time is active in building extensions to develop coal territory.

Nor must the activity of the Southern Railway be overlooked. It is working steadily toward providing a double-tracked line all the way from Washington to Atlanta, and has already built much of the second track, to which additions are made from time to time. Recently it started the double-tracking of its line from Atlanta to Gainesville, Ga., also the construction of lap sidings between Atlanta and Macon, and now it has just announced plans to build a number of other passing tracks on its line from Asheville, N. C., to Morristown, Tenn., and also from Knoxville to Chattanooga. Then the Seaboard Air Line has in view the double-tracking of its road from Norlina to Hamlet, N. C., traffic on this busy division being of such increasing density as to make the advantages to be had from a second track very apparent, while it is building a large number of sidings and greatly increasing its terminal facilities at Savannah, Jacksonville and Tampa.

Looking westward in the South, the Illinois Central is found to be busily improving the Yazoo & Mississippi Valley Railroad in Mississippi and Louisiana, so that the improvement now progressing will, when finished, give the road double track from Ponchatoula to New Orleans. Then, on the other side of the big river, the Missouri Pacific Railway, in addition to making general betterments to its Western lines, has just decided to greatly improve its water-grade route to the Crescent City, laying heavy rails and substantially ballasting it, besides building a cut-off track 40 miles long from it to Memphis, these two things being a result of a traffic agreement with the Frisco system, which will also use the road and share in its maintenance.

Still farther on the Kansas City Southern is seen to be upbuilding its already excellent road to make easier grades and curves, and the Missouri, Kansas & Texas is likewise revising line, besides putting in some second track on its Oklahoma route. Allusion may also be appropriately made to the Santa Fe's great line across Texas from southeast to northwest, another large section of which has just been put in operation; the Florida East Coast Line to Key West, soon to be completed, its 170-mile line now building into the Everglade section, and the Western Maryland extension to Connellsville, as evidencing the great enterprise and liberality marking expenditures for railroad work.

A RAILROAD MISTAKE.

Very unwisely, we believe, the railroads of the South continue a system inaugurated a few years ago in the handling of their mileage books. As now worked, the mileage book is not good on a train, but is simply good to secure a ticket. It is not good for the checking of baggage, as it formerly was, and an infinite amount of trouble is given to travelers as well as to ticket agents under a system for which we have never been able to find a satisfactory explanation. We have had railroad people try to explain it, but the more they have explained it the less we have seen any justification for it. In this case it looks as though the railroads are putting upon the traveler a burden which they ought themselves to carry.

A specific case will illustrate the story. Going from the South to Jacksonville a traveler desired to stop over

night at two or three points. He did not need his trunks, and would have been glad to have checked them direct from Baltimore or Washington through to Jacksonville. In that case the railroad would have had to handle the baggage but once. It was necessary, however, to exchange mileage for a ticket from Washington to Richmond, the first stopping point, and the baggage could only be checked to Richmond. The next morning more mileage had to be exchanged for another ticket from Richmond to Camden, and the baggage had to be rechecked to Camden and rehandled by the railroad. The next day it was necessary to stop at Columbia, and again the baggage had to be rechecked and rehandled. Again it became necessary to exchange mileage for a ticket from Columbia to Savannah, and again the baggage had to be rechecked and rehandled. And finally at Savannah another ticket had to be secured in exchange for mileage, and again the baggage had to be rechecked and rehandled.

Every ticket agent of the railroads operating under this system is crowded with unnecessary work at train time. Every baggage agent has to do far more work under a rush than ought to be necessary, for a great deal of baggage could, as in this case, have been checked through with one handling, instead of five or six. It would seem that a mileage book could be devised in which the baggage checking could be indicated for the full distance shipped, and the traveler ought then to be able to get on board the train and use his mileage for any distance he travels without having to secure a new ticket in exchange for mileage at every stopping-off point. To say that a system cannot be devised for handling mileage on this basis, and the railroad protected from the loss, would seem to indicate inefficiency, or an unwillingness to assume burdens which the railroads, and not travelers, ought to bear. In some way it must be possible to create a system by which travel is made less troublesome to the people. The railroads ought to find such a system. In the introduction of the present method the railroads antagonized the traveling public, and, instead of doing all in their power to create friendship, they aroused bitter hostility on the part of thousands of travelers. Every time a passenger goes through this method of getting tickets and checking baggage he gets mad, and we have never yet known a ticket agent who was not, when he felt free to talk, bitter in denouncing the present system.

SOUTH, BE ON THY GUARD.

The Northwest, the far West and the Pacific Coast are apparently leagued in the most far-reaching plans ever undertaken to turn population from the East and the South across the continent. A dispatch from St. Paul, Minn., published in the New York *Herald*, referring to the \$600,000,000 mortgage to be issued by James J. Hill's railroad, says:

The issue in connection with Canadian reciprocity presages an era of railroad building in Canada by Mr. Hill surpassing all previous performances.

Mr. Hill is only one of the great forces in railroad building in Canada tremendously interested in turning population from the United States into that country and creating hundreds of millions of value there by draining the East and the South and the Central West of population for the benefit of Canada and the far West. Very naturally, Mr. Hill and the officials of his

road are enthusiastic in their support of many schemes for the betterment of the far West, the carrying out of which would be at the expense of the South. But these particular schemes are only a part of the game. Other movements of equal importance are under way. A shrewd press agent of the San Diego-Panama Exposition, so it is reported, has been busily at work cultivating throughout the country interest in this undertaking with a view to increasing travel from the South and the East to California. Glowing stories of the beauty and the mysteries and the wonders of the far West, its natural parks, its mountains, its lakes, are being published in the East, even in Southern papers, as interesting bits of descriptive news. Soon the San Francisco people, with their plans for the Panama Exposition, will be at work heralding in every possible way the wonderful things they propose to do and arousing, as far as can possibly be done by almost limitless money and by skilful advertising ability, a desire to visit the Pacific Coast. The stake at issue is a great one. The Northwest and the Pacific Coast are doing the most masterful work ever done in this or any other country to attract population and capital. They can only draw to a large extent from the East and the South; to some little extent from the Middle West. In times past, before our Southern railroads appreciated the game, they found it an easy task to secure co-operation in the South itself. They have reaped a harvest of vast material prosperity by the rush of the army of settlers who have poured from the South and the East to the far West. They have evidently determined to make all that has been accomplished in the past seem small in comparison with what they are now planning to do. Everywhere there are seen evidences of the exceeding shrewdness of the campaign, of the almost limitless fund of money available for the work, and of the magnificent campaign of advertising that is being carried on by railroads and other interests. The 2,500,000 Southern-born whites who, between 1865 and 1900, largely by this means were drawn from the South into other sections represented the most gigantic loss which could come to any country—a loss which, counted in dollars, would run far into billions. The South raised these people, gave them the inheritance of strength of character and ability to do things, and then presented them, full grown and vigorous in their manhood, as a free gift to the West and the North and the Pacific Coast—the greatest and costliest gift ever made by any country on the face of the earth to any other country. Just at the time when the South is beginning to recover from the result of this priceless gift to the enrichment of other regions, and when there is seen a tendency of population to move South, renewed efforts to populate the far West and Canada by drawing people from the South and the East are being made. The stake in the game is the greatest for which any giant railroad builders, like Hill and those associated with him, or any other aggregation of vast wealth and influence as represented by the whole Pacific Coast, has ever played. It is a stake for billions. The game is being played to win other millions of men from the South and East that their coming may add other billions of dollars to the wealth of Canada, the Pacific Coast and the Northwest. Well may every friend of the South and every

railroad interested in the South hear the warning. Be on thy guard, for many are the ways in which these long-headed, daring, skilful developers of the Pacific Coast will "work" the South. They are doing it now to our loss. No one can help admiring their ability and energy. From them the South could learn many lessons. Unless the South is to see a continued drain of its population it must meet the game of the West with equal ability and energy and with an equal readiness to spend money in order to make money.

THE STRONGEST POWER IN BUSINESS BUILDING.

A very aggressive position in behalf of the lumber industry was taken by Mr. W. A. Gilchrist of Memphis at a meeting of the National Lumber Manufacturers' Association in Chicago recently. Mr. Gilchrist, having watched the inroads which are being made upon the lumber industry for building operations by some of the work of makers of cement, brick and other building material, took the ground that the time had come for the lumber people to make a fight for their own interests. He advised that this should be a big, broad advertising campaign.

In one particular, however, we think Mr. Gilchrist's plan is not as strong as it might be. He suggested a broad, nationwide campaign of advertising, not of individual lumbermen, but of lumber associations. In order to awaken greater interest throughout the country in the use of lumber. The plan for broad advertising by lumber associations unquestionably has much merit and it ought to be vigorously pushed, but individual lumber concerns ought also to be encouraged to advertise their particular product. Advertising is the creator of trade. It is indeed the very life of trade. Without it business would stagnate and die. It is just as essential as is an office, or a bookkeeper, or a stenographer. In fact, it is more so, for business can be created and maintained, to some extent at least, without a fixed office or without clerical help, but advertising is the one thing which cannot be dispensed with.

Publicity, whether through a show-window display or anything else designed to attract attention, is an effort to advertise. Countries, States, cities and towns, railroads and other great business organizations all need advertising as an absolutely essential part of their work, unless they are willing to retrograde. "Deterioration" might be written with safety upon any enterprise which disregards the value of advertising. Mr. Gilchrist's suggestion for broad advertising by lumber associations would produce some good if carried out intelligently, but the individual lumber man must create a demand for his individual product. He must create a market for his product whether he be making shingles or other finished lumber. He is not a man of initiative if he cannot find some special feature to advertise with a view to identifying himself in the public mind with the production of a certain line of goods. The skilful business man making shingles in competition with a thousand other shingle-makers, can, if he acts wisely, impress his particular brand of shingles upon possible customers to such an extent that they will hunt for his shingles when buying. This policy has been worked to very great success by cement manufacturers. It can be followed by lumber manufacturers. Some of the cotton mills which are complaining of

hard times might have been in a better situation if they had utilized their opportunities in making a national name for their particular product.

Advertising is in its infancy. The business man who wants to succeed must utilize broad, comprehensive advertising, and do it freely, or else he will surely get left. There are a thousand lumber people in the South who could greatly increase their business and enlarge their profits by judicious advertising, but most of the advertising now done by lumber people is practically valueless, for it does not reach the consumer. It has been said that the cost of all advertising is paid by the man who does not advertise, because he pays the penalty by not advertising of helping to enrich the one who does advertise.

Much of the so-called publicity of the day is not advertising. Many of the men who think that they are publicity experts, and are prepared to give advice as to where and how to advertise, know very little about real advertising. They think publicity means advertising, whereas publicity may be of such a character as to be detrimental. A good many cities in the country are trying by all kinds of cranky means to get their names in the papers, under the impression that this is helpful advertising.

If the lumber people accept Mr. Gilchrist's suggestion as to advertising in general, they ought to largely advertise individually also. Every other business interest must come to see the necessity of advertising, just as Mr. Gilchrist sees the necessity in the lumber trade.

NEED FOR CANNERIES.

There is a great need in Florida, as in many other parts of the South, for the establishment of fruit and vegetable canneries. At times a large amount of fruit and early vegetables are wasted because markets are glutted or railroads are unable to handle them promptly, and the growers are thus put to great loss, but these very people within a few months are often buying canned goods put up in the North or West. Moreover, there is a large amount of fruit sometimes too ripe to bear long shipment which could be canned to great advantage. The South is a good field for canners. In every community the matter ought to be investigated.

KENTUCKY CITIES FACTORIES.

In the five years between 1904 and 1909 the capital invested in factories at Louisville, Ky., decreased from \$79,999,000 to \$79,437,000, the value of products increased from \$83,204,000 to \$101,284,000 and the average number of wage-earners from 24,985 to 27,023, according to the Census Bureau.

At Lexington there was a decrease in capital from \$2,064,000 to \$1,896,000, and an increase in the value of products from \$2,774,000 to \$2,851,000.

At Covington there was a decrease in capital from \$6,725,000 to \$6,634,000, and an increase in the value of products from \$6,100,000 to \$8,712,000.

At Frankfort the capital increased from \$1,387,000 to \$2,403,000, and the value of products from \$1,747,000 to \$3,083,000.

There were increases at Owensboro from \$2,845,000 to \$4,294,000 in capital, and from \$3,319,000 to \$3,506,000 in value of products, and at Paducah from \$4,393,000 to \$4,703,000 in capital, and from \$4,443,000 to \$4,967,000 in value of products.

Louisiana's Island Salt Mines.

[Special Correspondence Manufacturers Record.]

New Iberia, La., June 10.

After a visit to the marvelous salt mines at Avery Island and Weeks Island, on the Vermillion Bay coast line south of here, one may say of Louisiana that if every other source of supply should be suddenly cut off, here is found salt sufficient to supply the world for ages to come.

In the mind of the general public, Louisiana is not usually thought of as a mineral State, her plantations, with their broad acres of cane and cotton, corn and rice, and her forests of cypress and pine being the features which would naturally occur to the ordinary mind when the resources of Louisiana are brought to mind.

Nevertheless, it is a fact that there is a workable deposit of practically pure rock salt in the Avery Island mine estimated at 2,000,000,000 tons. The total consumption of salt last year in the United States was under 5,000,000 short tons. The salt deposit at Weeks Island is of possibly equal extent, and there are three other islands in the remarkable group to which Avery and Weeks islands belong, which are of the same salt dome origin and formation, in all of which salt has been encountered.

The deposits at Avery and Weeks islands are the only ones being worked now, and as the output in these mines could be increased to almost indefinite extent, sufficient to meet any requirements of expanding demand, it is unlikely that in any of the other island there will be any extensive mining development undertaken for many years to come.

The five islands are on a "strike" or line running from the northwest to the southeast. The northwesterly one is known as "Jefferson's Island," the famous actor having owned it and made it a winter home for many years of his life. On this island, formerly known as Cote Carline, a number of holes have been drilled to locate the contour of the salt formation, and one drilling was in a large body of salt when drilling ceased at 2090 feet. At one place the salt approached within 91 feet of the surface. It is the opinion of geologists that salt could here be mined to excellent advantage, although no operations have been conducted as yet.

After Avery and Weeks islands comes Cote Blanche. There is much erosion of this island on the water side, and the opinion of geologists is that the salt dome apex is some distance out in the Gulf. At Belle Isle, the last island in the group, a great deal of development has been done at various times, and more than a million dollars has been spent in efforts to develop the salt industry there and also in borings to bring in an oil field. Work has finally been abandoned here, and expensive machinery, evaporating pans, etc., have been left to decay.

The Avery Island development was begun as long ago as 1862, at which time the mine was worked to supply salt to a large portion of the Confederate States. The island is a mile long and a half mile wide. During the war between the States it was the property of Judge Daniel D. Avery, and his descendants still own the island. Although salt had been discovered on the island as long ago as 1790, when bubbling springs were found so brackish that the water was boiled down and salt secured, yet the island had been maintained as a plantation until the exigencies of the war demonstrated that salt must be secured from local sources.

It is related that during 1862 as many as 400 hands were employed night and day

to mine the salt, and that from 100 to 500 teams from every section of the Confederate States were constantly on hand, each one of the drivers "waiting, cash in hand, for the long-wished-for load." It is averred that more than a million dollars' worth of salt was sold from this mine in the year of 1862. In 1863 General Nathaniel P. Banks sent a detachment out which captured the mines and destroyed the buildings and machinery.

It was not until 1867 that working at the mines was again resumed. A shallow shaft 8x8 and only 83 feet deep was then sunk, but after working for some years the mine became flooded, and it was afterwards deepened to 186 feet. This shaft was also flooded, and a new shaft was begun in 1889 21x10 feet, 518 feet deep. Running from the shaft are galleries 30 to 33 feet wide, more than a mile in length, and running in two directions at right angles with each other, leaving square pillars of salt as supports. There is here a solid body of salt which extends under a large part of the island, and has been found by drilling to be 2929 feet in depth. The drill shows the superficial lens of salt to be 2263 feet in thickness, but after passing through 70 feet of foreign matter, the drill again entered salt rock of unknown thickness.

The salt is simply quarried or blasted out by compressed air drills and dynamite. It is then conveyed in small cars, drawn on a narrow-gauge track by mules or horses upon the platform of a cage and hoisted and dumped at the top floor of the mill. Here the salt blocks are crushed and separated into the various grades of salt ready to be put on the market. It is of such remarkable purity that it is subjected to no purification processes whatever. The salt is simply crushed, screened, mechanically separated and made ready for the market.

Although not the show places that the marvelous Galacia mines of Wieliczka in Austro-Hungary are, which are Government-owned, the Louisiana salt mines are among the very few in the world which can be visited with comfort and safety. In the Wieliczka mines, operations have been carried on for a thousand years, and it is altogether the largest and most beautiful salt mine in the world. It has been quarried out into chambers which lie seven stories, one above the other. The chambers communicate by horizontal galleries and the stories are connected by shafts or winding stairs. There are ballrooms and railroad stations, most elaborately wrought, with chandeliers and ornamentalations, all carved out of glistening salt. One of the chandeliers is 33 feet high and 60 feet in circumference. Balconies, columns and every sort of decorations are of rock salt. The workmen receive wages that enable them to make only a bare living, and so valuable is the salt (the price in Austro-Hungary being \$30 per ton) that when any workman leaves the mine, which he seldom does, he is searched to make sure that he is not smuggling any salt away.

In the Louisiana mines the pay of the workmen is ample to keep them in comfort. Their hours are not long, and the conditions are not onerous, and yet the price at which the salt is sold is about \$1.87 per ton.

While there are no grand ballrooms in the Louisiana mines, yet they are interesting places to visit, and parties frequently make a trip of exploration. On one occasion, some few years ago, quite an elegant reception was given in the Avery Island

mine, with Miss Alice Roosevelt as the guest.

Avery Island has other distinctions besides being the location of one of the most interesting salt mines in existence, for here is the home of Tabasco sauce known to connoisseurs of the world today. The origin of Tabasco sauce, as related by descendants of Mr. Edmund McIlhenny, is that in 1866 Mr. McIlhenny secured some peppers from friends of his who had been in Mexico, and who had found in the State of Tabasco some peppers with unusual qualities. Mr. McIlhenny took two pods and planted them and experimented with the manufacture of a new kind of pepper sauce. The soil of the island and the atmosphere combined to give a pepper of distinct pungency and flavor, and from that beginning the industry has grown until the McIlhenny Tabasco sauce has been introduced to every corner of the civilized world.

On Avery Island the present generation of the McIlhenny family live and cultivate the 2000-acre plantation in cane, corn and peas, as well as okra and various other crops, with from 400 to 500 acres in peppers. Here is the laboratory or factory where Tabasco pepper sauce, powdered peppers, ordinary pepper sauce, etc., are manufactured, and nearby is the packing-house or cannery, where figs, okra, tomatoes, etc., are prepared for market.

Another distinction of Avery Island is a breeding ground for water fowl, a pond three-quarters of a mile in circumference having been set apart for a bird reserve. No shooting is permitted on the island, and to this protected spot birds by thousands have come to nest and rear their young. There are five varieties of heron here, including 2000 pair of the beautiful snowy-white heron, a larger number than would be probably found in any other place in the United States, this beautiful bird having been almost exterminated by plumage hunters for the millinery houses, who kill the mother heron at nesting time, when the egret is in its most beautiful condition. These birds are so tame at their home that they can be approached to within 10 feet or so. The same bird when away from the preserve will take fright and flight if approached within 500 yards. There are also some 2000 brace of wood-duck here, and a number of other varieties of birds. Almost all of the available spots on the branches of the trees and shrubs growing in and about the pond are now filled, this result having come about within a few years after placing the first few pairs of heron in the pond.

Across Vermillion Bay from Avery Island is the Weeks Island salt mine. This island rises about 204 feet above sea level, having an area of 2500 acres, with salt deposit underlying practically the entire island. Salt was discovered here in 1898 by Gen. F. F. Myles, who had for a number of years previous operated the Avery Island property until it was leased by a company of which Mr. Mortimer B. Fuller of Scranton, Pa., is president. Over 40 test wells have been put down on Weeks Island to ascertain the form and topography of the upper surface of the salt deposit. When the location for a shaft was determined upon, 100 feet of 10-foot tubular casing was used in sinking the shaft to the salt mass. Below this a rectangular shaft was sunk to the extreme depth of 645 feet. Since that time wide chambers have been opened up, 72 feet in width as a rule, and carried up to a height of about 100 feet. Mining is carried on by first undercutting or blasting out triangular chunks of salt on the level of the floor of the mine, and about eight feet in height. The drills are worked by compressed air supplied from compressors in the power-house at the surface. Layer after layer of salt is blasted out, the workmen reaching the ex-

treme height by climbing to the top of the mass as it increases from blast to blast. In the Weeks Island mines the crusher is operated at the bottom of the mine. The salt is brought to the crusher by small dump cars drawn by a mule and is dumped into a huge bin below, from which place it is drawn into a five-ton self-dumping cage that makes a trip from the bottom of the shaft to the top of the mill and return in about four minutes. The capacity of the mine is thus about 75 tons per hour, or 750 tons per 10-hour day. The mine is lighted by electricity. There is no fire damp or inflammable gas in either of the Louisiana mines. A variety of grades of salt are produced by grinding and crushing the salt as it comes from the mill. The various grades and their uses are described by the Myles Salt Co. as follows:

The crushed salt, grades Nos. 1, 2 and 3, is used in refrigerating, curing hides, curing fish, making salt pickles, glazing in enameling and pipe works, and No. 3 is especially adapted for capping all sorts of meats put up in pickle in barrels. The C (coarse) and F (fine) salt is used for dry-salting meats, clearing oleomargarine, and in all sorts of chemical works. The A grade is a special one to suit the customer who regards No. 1 as too large and the C as too small for his purposes, such as making ice cream and pickles. The D grade is also a special one, consisting of powdered salt which results from the grinding of any of the crushed grades in the mill, and which is used for any purpose where rapid solution of the salt is desired.

The remarkable purity of the salt is shown in an analysis made by Prof. W. M. Lynch, assayer, United States Mint: Rock Salt—Moisture, none; sodium chloride, 99.84; magnesium chloride, .12; calcium sulphate, trace.

This remarkable purity of the Louisiana salt is one of its distinguishing characteristics, and these are among the few mines of the world where the salt is of sufficient purity to be used as it comes from the mines. Besides the very large domestic trade, the Myles Salt Co. is working up a business with South American and other foreign countries.

Louisiana has increased its production from about 40,000 tons in 1901 to nearly 200,000 tons in 1910. The statistics for Louisiana are not shown in the Government reports, the Louisiana production being included in the New York totals by reason of the fact that the Avery Island mine is under the same management that owns New York mines. It is stated that should the present tariff of 6 cents per 100 pounds in bulk and 10 cents in bags be maintained, a very much increased foreign business can be built up, and that by 1920 the Louisiana production should be at least 800,000 tons.

There is no place in the world where salt of equal purity is produced and sold so cheaply as in the United States. Solar salt, or evaporated salt water, which is made by cheap labor on islands and coasts of foreign seas, might be sold cheaper at the ports of entry, but it could not be shipped into the interior in competition with American-mined salt.

Louisiana is now the fifth State in the Union in quantity of salt production, but with the development of the salt domes in the interior and Northern Louisiana, which is likely to receive a stimulus from the discoveries recently made by Gen. F. F. Myles at Pine Prairie, in Evangeline parish, and the increased production of the Avery Island and Weeks Island mines, Louisiana will doubtless steadily increase her total production. The crystal purity of the Louisiana salt will doubtless commend it to an ever-increasing number of consumers, both at home and abroad.

While salt is produced in almost every

country in the world, it is stated that nowhere can salt of such purity be obtained at anything like the cost for mining in Louisiana. In few countries of the world is it possible to mine salt in the manner in which it is done here. Even in other parts of the United States where rock salt is produced it is usually obtained by introducing water into the wells, and, after practically complete saturation, pumping the water up and evaporating it.

Salt occurs in the shape of salines, either natural brine springs or from artificial brines derived from salt beds not adapted to mining, and also by evaporating sea water.

Salt production is about the oldest industry in the world. In Italy, the cradle of the salt industry, it has been manufactured commercially for 2500 years. Salt is so necessary to existence that in some parts of the world tribes will sell the members of their families in exchange for salt. Salt has been the cause of wars, and so important has it always been considered that in some places the passing of salt is established as a token of friendship, and women throw salt on a visitor as a friendly greeting. In some countries salt is so scarce that it is obtained through the ashes of grasses and a species of palm and other plants.

In some interior countries as much as a cent a pound is often obtained for salt, and in parts of Africa salt is exchanged for corn at equal weight.

In England, during the Roman occupation, soldiers were given salt in part payment for their wages, from the salt mines in Worcestershire. From this incident the word "salary" is derived.

In Germany the discovery of potash deposits, so valuable now and the cause of some international negotiations, if not friction, was due to the search for pure salt, because the 22 salines then in operation in Germany were inadequate to supply the market demands. The potassium salt deposits were first passed by as worthless when discovered in 1843. It was not until 1861 that the great value of the deposit was realized and the first factory for the manufacture of potassium chloride started at Stassfurt. Until that time the potassium salts had been allowed to accumulate around the mines until it was difficult to operate the rock salt which had been encountered at greater depths. Today the most careful investigation and research fails to discover anywhere in the world a deposit of potash equal in extent to that which Germany so long ignored and rejected.

ALBERT PHENIS.

ALABAMA STOCK-RAISING.

Plan to Counteract Damage by the Boll-Weevil.

Mr. C. A. Cary of Auburn, State veterinarian of Alabama, sketches as follows for the MANUFACTURERS RECORD the purposes in the plan to establish a packing-house at Montgomery:

"To stimulate cattle breeding and feeding by showing that cattle can be raised profitably on Alabama lands and by Alabama farmers, Professor Gray of our experiment station, in co-operation with the United States Bureau of Animal Industry, has demonstrated that cattle can be both fed and grazed in summer and winter, and thus matured at a profit to the farmer or the producer.

"To eliminate the cattle tick in order to cut down the losses by tick fever among cattle. This is now being done in a measure by the Bureau of Animal Industry, the State Live-Stock Sanitary Board and some of the counties (co-operative work).

"To stimulate the hog industry by extensive publication of hog-feeding experi-

ments conducted by Professor Gray of the Alabama experiment station. He has conclusively proven that hogs can be brought to the pork stage as cheap in Alabama as in any place in the United States. The State should aid the farmer by giving freely to all who may need it hog-cholera serum. This will prevent the larger part of the losses from hog cholera.

"To interest directly the farmers in the sheep industry along similar lines.

"To interest directly the capitalists and Business Men's League in Montgomery by showing them that the farmers will turn readily to profitable live-stock raising and feeding when the cotton boll-weevil comes, and calls for a reorganization of our farming methods.

"To show the capitalists that the hog, cattle and sheep industry are growing and will grow more when a local market is always at hand.

"To point to the success of the Atlanta and Natchez or Vicksburg packing-houses, which are successful under conditions similar to such as we have in Alabama."

Enormous Water Resources.

As water is a country's greatest mineral resource, the study of the water resources of any country is one of its most important investigations. The United States Geological Survey has been making a systematic study of the rivers and other water supplies in the United States, and during the last 15 years has published over 250 reports presenting the results of this work.

Water-Supply Paper 263 sets forth briefly the magnitude of the more important phases of water development. Thus in the matter of inland navigation the Federal Government alone has expended in the neighborhood of \$300,000,000, and prospective expenditures will approximate as much or more. It is obvious that the determination of stream flow is necessary to the intelligent direction of these large disbursements. In irrigation the United States Government is now expending or Federal reclamation systems about \$60,000,000, and this amount is far exceeded by the private expenditures for this purpose in the arid West. It is further obvious that the integrity of any irrigation system is based absolutely on the amount of water available. The highest use of water is that of domestic supply, and in connection with this phase of the subject not only quantity, but quality of water is of prime importance. In very recent years water-power has become a matter of great national moment. Before the day of improved electric transmission the importance of water-power was confined largely to the locality at which it was generated, but it has now become a public utility in which the individual citizen is vitally concerned, and as the amount of water-power that may be made available is dependent on the flow of rivers, the investigation of stream flow is a prerequisite to the intelligent management of this source of energy.

The drainage of the vast swamp areas of the country—approximately 70,000,000 acres—is a matter of water engineering, and the study of the run-off is of first consideration in connection with any drainage project. Drained swamp lands become generally the most fertile of our agricultural areas, and the reclamation of the swamps of the United States should add from \$2,000,000,000 to \$4,000,000,000 to the nation's assets.

Finally, in the matter of flood prevention, a thorough knowledge of stream flow, both in the contributing areas and along the great lowland rivers, is the first necessity. The flood damage in the United States is estimated to be in excess of \$100,000,000 annually.

"Combinations in Restraint of Trade."

By S. B. SARGENT of Charlotte, N. C.

Charlotte, N. C., June 12.

It is curious how innocent and harmless this thing looks according to the dictionary definitions (to a man innocent of legal knowledge), and in studying the dictionary it seems to the writer that if our legislators outlaw "combination" they must also outlaw "co-operation," and without the liberty to combine or co-operate our legislators will have settled poor old industry. But to get to definitions:

Co-operate, to labor jointly to the same end.

Combine, to unite in friendship or design.

Restraint, abridgment of liberty.

Trade, commerce, exchange.

Now, unite the dictionary definitions, we have, To unite with the design of abridgment of the liberty of commerce.

Is there in this broad land any such combination? If so, where? There are combinations, sure, but not for such a purpose, and combinations, like individuals, may possibly do an illegal deed, and I suppose, when found guilty, they, like individuals, should be punished and restrained, but that punishment does not mean that combinations or individuals should be eliminated.

Now, an individual has the liberty to trade or not to trade; so also has a combination, but neither individuals nor combinations have the right to coerce another to trade or not to trade. An individual or a combination or a co-operation has the right to canvass their own business affairs, and if they find it is unprofitable for them to trade, surely they have the liberty not to trade, even if such action involves the shutting down of the co-operating plants, so long as they coerce no one, and if a combination should so elect to act, surely they have exerted no more coercion than the individual who refuses to sell to an anxious and willing buyer who will not pay him a profit.

If this conclusion is right and legal, why cannot the cotton manufacturers, who have been losing from two to four cents a pound on their product for the last two or three years, meet and devise a voluntary curtailment of their product? Such voluntary action on the part of said manufacturers surely would coerce no one; they do not even coerce the buyer, for he can buy elsewhere, and if he is so particular that he must have the goods manufactured by the closed plant, an important point to remember is that he can secure these identical goods, for said manufacturers have said goods in their warehouses and are anxious to sell them, but the buyer will not take them at a profit.

This action would not restrain trade, for manufacturers now have a surplus product that they are anxious to trade and cannot. Such voluntary curtailment would be a restraint of wasteful production, and not a restraint of trade unless said manufacturers close their plants, exhaust their supply of manufactured product and refuse for coercive purposes to produce a trade supply. Yet some pinhead in Congress is now crying "restraint of trade" because he alleges that some certain or uncertain South Carolina manufacturers contemplate co-operation to curtail wasteful production. In many cases if said manufacturers had been wasting their own instead of their stockholders' substance they would have shut down their plant two years ago and risked

a Federal indictment on the charge of restraining trade.

This same Federal Government needs some curtailment of wasteful production in its own affairs. It is notorious that they cannot compete with private concerns in cost of construction of its own naval vessels, with similar wasteful production in other departments, but they draw their deficit from your pocket and mine, while a private concern under similar methods would go bankrupt. The Government should put its own house in order in this respect and throw away its "Big Stick" until industry and trade get a chance to recover from its last depression.

Now, if I am wrong in my conclusions, show me how and where.

THE COTTON CROP OF 1910.

Review by the Census Bureau of the Closing Season.

The estimated value of the crop of 1910, the most valuable ever produced in the United States, is \$963,180,000, compared with \$812,090,000 for 1909; \$681,230,000 for 1908; \$700,960,000 for 1907, and \$721,650,000 for 1906, according to the Census Bureau.

The value of the crop of 1910 is \$151,000,000, or 18.6 per cent., more than that of 1909, notwithstanding the fact that the quantity of cotton is only 1,690,306 bales, or 16 per cent., greater.

The value of the cotton crops of the five-year period ending with 1910 is \$3,879,110,000, while the value of the five-year period ending with 1899 is \$1,529,500,000.

During the last five years the price of lint cotton has averaged about 12 cents per pound, or about \$60 per bale, and the value of the cottonseed has increased from \$13.80 per ton in 1906 to \$27.40 per ton in 1910.

The value of a 500-pound bale of cotton, including the value of the seed, was \$87.15 in 1910, compared with \$50.37 for 1904 and with \$30.22 in 1898. To the producer of a crop of 20 bales this means that whereas he realized \$604 in 1898, he received \$1743 in 1910, which increase, notwithstanding a greater cost of production at the present time, measures the difference between a mere existence and a comfortable and independent living.

The quantity of cotton reported for the crop of 1910, with linters included and round bales counted as half bales, is 11,965,962 running bales; expressed in gross 500-pound bales, the crop amounted to 12,065,688 bales, which is 1,690,306 bales, or 16.4 per cent., greater than the crop of 1909, but 1,581,618 bales, or 11.6 per cent., less than the crop of 1908.

The average annual production of cotton in the United States for the past five years is 12,175,867 bales, or 170,179 bales more than the crop of 1910. Of the total production in 1910, the territory east of the Mississippi River contributed 6,701,447 bales, or 55.8 per cent., compared with 6,093,334 bales, or 59.1 per cent., in 1909, and 7,355,178 bales, or 54.1 per cent., in 1908. The States west of the Mississippi River returned 5,304,241 bales, or 44.2 per cent., in 1910, compared with 4,222,048 bales, or 40.9 per cent., in 1909, and 6,232,128 bales, or 45.9 per cent., in 1908. During the five-year period 1906-1910 the States east of the Mississippi contributed 54.4 per cent. of the aggregate production, while those west of that river produced

45.6 per cent. The smallest aggregate production by the States east of the Mississippi in this period was 6,093,334 bales in 1909, and the largest 7,355,178 bales in 1908, a variation of 1,261,844 bales; the smallest aggregate production by the States west of the river was 4,222,048 bales in 1909 and the largest 7,233,210 bales in 1906, a variation of 3,011,162 bales. Although the percentage of the total production contributed by the two sections has fluctuated greatly for individual years, the actual production in the eastern section has been comparatively regular.

The production for all the States, except Georgia and Louisiana, showed a material increase in 1910 over 1909. Oklahoma and North Carolina make an especially good showing for 1910, each State not only exceeding its production for 1908, the former by 35.7 per cent. and the latter by 9.6 per cent., but also showing the largest crop ever produced. The crop of South Carolina in 1910 nearly equaled, in number of bales, its crop of 1908, and exceeded its production for any other year. The Texas crop in 1910 was more than half a million bales larger than in 1909, but did not reach the dimensions attained in 1908, 1906 or 1904. The unstable condition of cotton production in Texas is disclosed by the fact that the State showed a decline of 44.9 per cent. in 1907, compared with 1906, when the largest crop that it ever produced was grown, and an increase in 1908 of 65.8 per cent. over the crop of 1907, while in 1909 the crop decreased 33.4 per cent. from that of the preceding year, and in 1910 increased over that of 1909 by 21.7 per cent. This State produced 26.4 per cent. of the total crop of the country in 1910, 25.3 per cent. in 1909, 28.8 per cent. in 1908, 20.8 per cent. in 1907, and 31.5 per cent. in 1906. In 1910 the production was 94,585 bales less than the State average for the five years.

The production in Georgia from the crop of 1910 amounted to 1,820,610 equivalent 500-pound bales. While this is only 160,000 bales less than the crop of 1908, the largest crop ever produced in the State, it is the smallest grown in the last four years. The production in Louisiana has been falling off steadily for a number of years. The crop in 1906 was 1,012,573 bales; in 1907, 694,066 bales; in 1908, 486,350 bales; in 1909, 264,676 bales, and in 1910, 255,733 bales. The decline in production in this State is due to several causes, the principal one being the ravages of the boll-weevil. A considerable portion of the land planted in cotton in former years is now being planted in sugar-cane and in rice.

The center of cotton production in 1859 was approximately 13 miles southeast of Macon, in Noxubee county, Mississippi; in 1879 it was 11 miles south of Columbus, in Lowndes county; in 1899 it was 13 miles southeast of Lexington, in Holmes county; in 1906 it was 5 miles northeast of Mayersville, in Issaquena county; in 1908 it was 4 miles west of Lexington, in Holmes county, and in 1910 it was 3 miles southwest of Vaiden, in Carroll county. The total area of the counties in which cotton was ginned from the crop of 1910 is approximately 625,000 square miles, or about 400,000,000 acres. Of this, only about 1 acre in every 12 was devoted to cotton.

The cultivation of Sea Island cotton in the United States at the present time, as shown by the returns of ginneries, is confined to 43 counties, distributed as follows: Fourteen in Florida, 25 in Georgia, and 4 in North Carolina, but it is not grown in all parts of the counties from which it is returned. Attempts made in many other parts of these and other States

to grow this cotton have produced such unsatisfactory results that all efforts to grow it outside of certain well-defined areas in the States named have been abandoned.

The average quantity of Sea Island cotton produced each year is equivalent to about 70,000 bales of 500 pounds each. Of this amount, an average of 25,000 bales is exported, and 45,000 bales are consumed in this country.

Egyptian cotton, the demand for which is increasing in this country, is to some extent a competitor of Sea Island, and about 150,000 bales, valued at more than \$14,000,000, are being imported annually.

The average price of upland cotton for the past nine years has ranged from 8.20 cents in 1902 to 14.69 cents in 1910. The average price is used in estimating the total value of the crop. Sea Island cotton grown in South Carolina sold in 1910 at an average price of 35.62 cents per pound, while the average for 1909 is 32.85; that grown in Georgia and Florida averaged 27.36 cents this year and 27.10 in 1909. The grades known as *Georgias* and *Floridas* sold on the same terms. The average price of Egyptian cotton for 1910 was 22.25 cents, and relates to cotton imported into the United States prior to April 1, 1911.

The world's production of cotton in 1910, as measured by the factory supply—that is, the quantity entering into commercial channels—was 19,171,000 bales; in 1909 it was 16,776,000 bales; in 1908, 19,636,000 bales, and in 1907, 16,512,000 bales. The 1910 production for mill consumption represents an increase of 2,395,000 bales, or 14.3 per cent., over the production in 1909—a decrease of 465,000 bales, or 2.4 per cent., from 1908, and an increase of 2,659,000 bales, or 16.1 per cent., from 1907. The average production of cotton for the world during the past seven years has been approximately 18,085,000 bales, or 1,086,000 less than the production of 1910. It is pointed out that the figures are intended to state the world's yield of cotton for mill consumption and not the total production. Large quantities of the fiber grown in China, India, Persia, Russia, and other Eastern countries and in South and Central America are consumed in the homes of the people, and do not enter commercial channels. No accurate estimate can be made of the amount of this cotton. The world's production in 1910 amounted to 9,585,500,000 pounds, with an estimated value of about \$1,250,000,000.

In 1910 the United States contributed 59.9 per cent. of the total quantity of commercial cotton of the world; British India, 18.3 per cent.; Egypt, 8 per cent., and Russia, 4.7 per cent.

Big Linseed Oil Mill in New York.

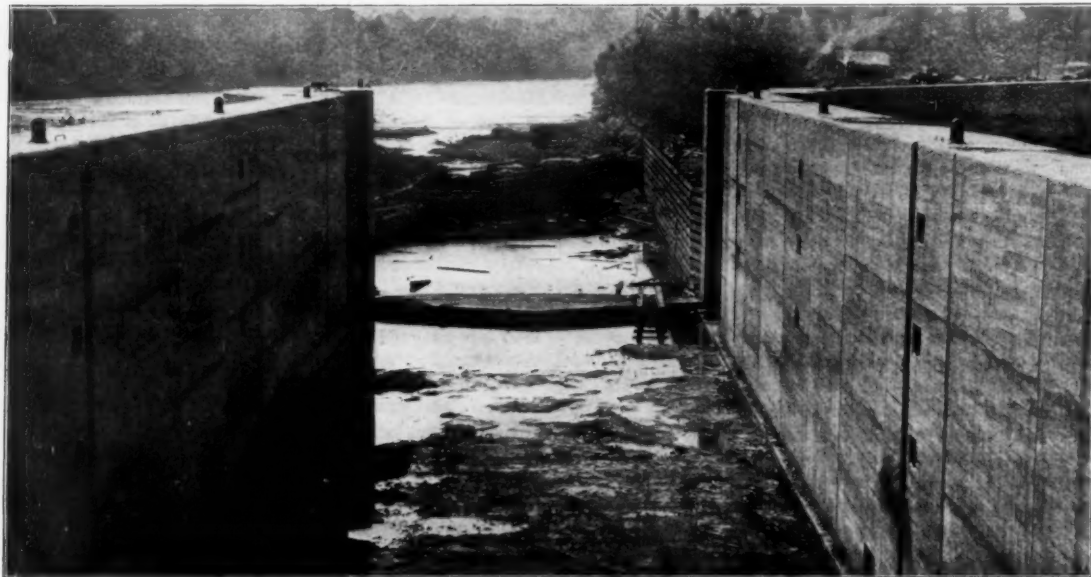
The French Oil Mill Machinery Co. of Piqua, O., has been awarded contract for the press-room equipment for the new 48-press mill to be built at New York city by the Midland Linseed Co. of Minneapolis, Minn. It is the purpose of the owners, so we are informed, to make this mill the finest in the country in every respect, and the machinery purchased will embody all the latest improvements, enabling them to secure the maximum oil yield with the minimum of labor and operating costs.

Sabine-Neches Waterway.

Orange county, Tex., voted overwhelmingly last week for an additional \$43,000 bond issue to make up its portion of the amount of money needed for the completion of the Sabine-Neches canal and deep waterway to Orange.

The second annual Statewide Immigration Convention of Mississippi will be held this week at Gulfport.

LOCKS AND DAMS IN BLACK WARRIOR RIVER, ALABAMA.



LOCK CHAMBER, LOCK NO. 15, OCTOBER 30, 1909.

For more than a quarter of a century it has been the dream of Alabama to see the Black Warrior River made navigable throughout the year, that the great coal

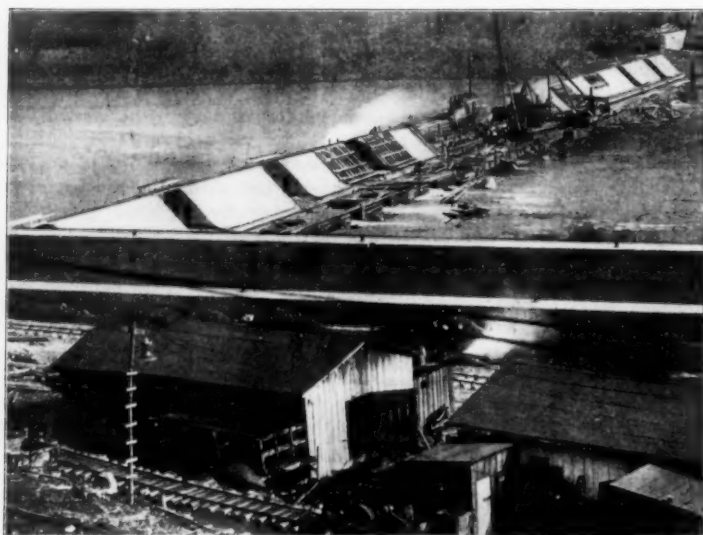
14, and one two-yard cube mixer, driven by Bucyrus crane engine, direct connected, was used at Lock 15. The concrete was delivered to the lock walls by dinkey loco-

Pittsburg, Pa., under the supervision of Major H. Jervy, district officer. Mr. G. K. Little was assistant engineer in charge of all construction on the river, and the

Modern Factory Building Plans.

Writing to the MANUFACTURERS RECORD regarding his plans for the Paper Mills Co.'s proposed additional building at Baltimore, Theodore Wells Pietsch of Baltimore, the architect says:

"The company is planning the erection of a large factory building in connection with the present one. When completed the entire plant will cover an area of 45,000 square feet, with a floor space of more than 135,000 square feet. The building will be of the heavy slow burning mill construction type, with brick walls and slag roof. It will practically occupy an entire city block, with light on all four sides. Its equipment will include four direct-connected freight elevators, fireproof vaults, enclosed fireproof stairways, engine and boiler-rooms, electric wiring and sprinkler system. About 70,000 square feet of space will be available, subdivided in units or sections to suit. Tenants will be furnished power, heat and light. Sidings of the Baltimore & Ohio Railroad will enter the building. The Washington, Baltimore & Annapolis Railway passes the main entrance, where the offices are located, and two city car lines on three-minute schedules are adjacent to the site, which is less than 10 minutes' dis-



VIEW LOOKING TOWARD ABUTMENT, JANUARY 4, 1910.

and iron regions of that State might secure water transportation to the Gulf. For many years this work has been under way. The National Government has expended millions of dollars in the improvement of the Black Warrior River, and Alabama's dream of water transportation to the Gulf is in a fair way to be realized.

The accompanying illustrations give some idea of phases of the construction of locks and dams Nos. 14 and 15, upon which some 70,000 barrels of Lehigh Cement have been used, the entire quantity passing the United States Government tests without a single barrel being condemned. These locks, Nos. 14 and 15, are in Tuscaloosa county, 14 and 20 miles respectively, above Tuscaloosa. The lift of each dam is 14 feet, and the material used in its construction concrete. The lengths of the dams are 930 and 870 feet, respectively. The lock walls are 387½ feet long over all, 33 feet high, with 7 feet of water over mitre sills. The material used in construction, as in the case of the dams, is concrete. The abutment is of the "T" type, likewise of concrete construction.

About 35,000 cubic yards of concrete were used on each job, the cement being used with crushed stone aggregate which was quarried on the site. Two three-quarter-yard Smith mixers were used at Lock

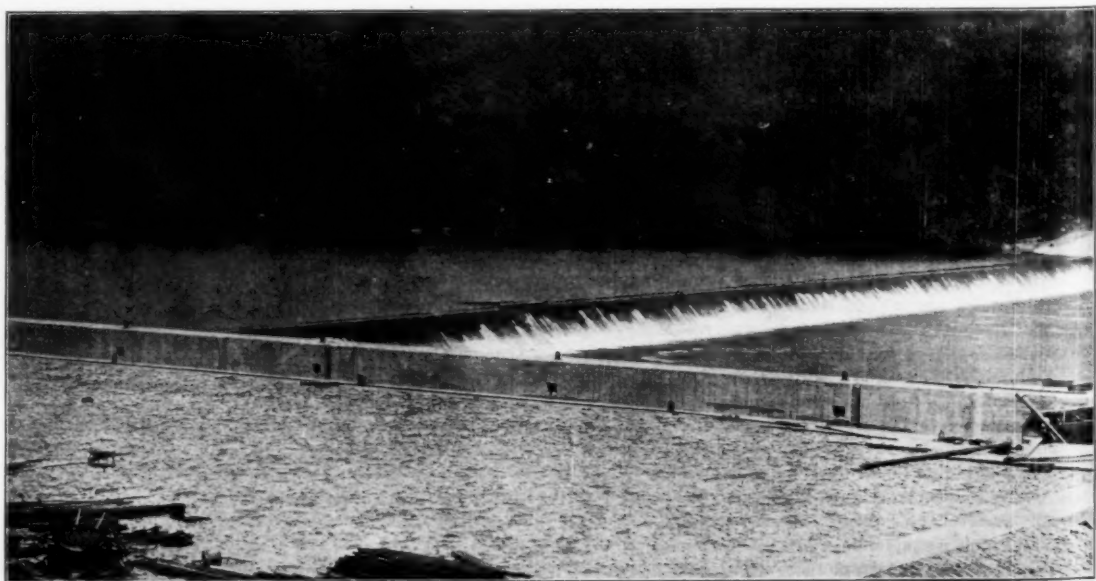
motives and flats, and placed with derricks. Cableways delivered the material to the dam forms at both sides. The work was done by the Dravo Contracting Co. of



GENERAL VIEW OF DAM, FEBRUARY 1, 1910.

work was done under the supervision of J. B. Battle, superintendent at Lock 14, and H. C. Mower, superintendent at Lock 15.

tant from the center of Baltimore. The fire insurance rate on the present building is 6 3-10 cents, and the rate on the new construction will not exceed this."



GENERAL VIEW, LOCKSIDE, APRIL 29, 1910.

WHY CHICKASHA GROWS.

Combining Manufacturing and Agricultural Activities.

[Special Cor. Manufacturers Record.]

Chickasha, Okla., June 14.

Any State that makes an increase of 100 per cent. in population in one decade must have good, substantial reasons back of this growth. The city that shows a gain of 321 per cent. in 10 years must also have actual merit and worth behind it. The former is the record of Oklahoma, and the latter is the record of the city of Chickasha, in the same State.

Only a few years ago it was possible to buy a farm near Chickasha and pay for it with one year's crops. In good seasons this can still be done on unallotted Indian and Governmental lands not yet put upon the market. In former days thousands of acres of natural meadows which could be had almost for the asking made the cattle-raising industry exceedingly profitable. This accounts for the fact that right around Chickasha there are now located some of the most successful feeders and breeders in the United States. The range where the buffalo formerly roamed is now the natural home of some of the finest cattle to be found anywhere. Only last year Mr. H. B. Johnson, one of the largest feeders of this section, sold in one bunch 450 head of cattle at Chickasha for \$100 per head. This transaction established a new record in the cattle markets of the United States for quality, quantity and price. Fully 30,000 head of hogs and 15,000 head of cattle were shipped from this county to the nearby markets during the year 1910.

For 50 miles in either direction along the Washita River there is a stretch of country some two or three miles wide which has often been compared, because of its fertility, to the Valley of the Nile. These lands produce in abundance not only the four staple crops—corn, cotton, wheat and oats—but equally well fruits and vegetables. Grady county contains about 700,000 acres, three-fourths of which is subject to cultivation, and only about 40 per cent. of it now being cultivated. In the uplands of this country there are thousands of acres of rich, sandy loam which under careful cultivation will produce almost any kind of a crop the farmer chooses to grow. Here melons and peaches are grown very successfully, while cotton in ordinary seasons, with proper cultivation, will make one bale for each acre.

Chickasha, only 16 years old, is a city of 12,000 people, and has one mile of paved streets for each 1000 inhabitants. The Washita River, from which the local water supply is drawn, furnishes an abundance of water in all seasons for a city of 100,000 people. The city owns and operates its own water plant, having 27 miles of mains through which is distributed the local supply. The city also has 28 miles of storm and sanitary sewers, 18 miles of concrete sidewalks, a \$40,000 city hall, all these improvements being secured since titles on real estate were made good seven years ago, taxes on the same having been collected only six years.

While the chief resource of the city is the splendid agricultural country surrounding it, nevertheless a good start has been made along industrial lines. Two of the largest cottonseed-oil mills in the State are located here. The Rock Island Railroad shops employ the year round over 400 men, with a monthly payroll of more than \$30,000. One flour mill has a capacity of 1000 barrels per day, and runs night and day practically all the year. Here is located a large furniture factory. The Rock Island, the Frisco and the Oklahoma Central railways furnish easy access to all parts of Oklahoma and Texas. Hydro-

electric power is furnished to all local industries by means of a dam across the Washita River, and power is sold to local companies cheap.

The Chamber of Commerce, with a membership of 350, is directing its work along the lines of developing the natural resources of the city and surrounding country. It is the policy of the organization to render service that will give the city lasting stability. In line with this plan early in the year 5000 bushels of the purest cottonseed obtainable in the Southwest was purchased in carload lots for \$1.25 per bushel. This seed was then distributed by the Chamber of Commerce to the farmers of this county for 75 cents per bushel, and it is firmly believed that this city will be the market for 10,000 bales of high-grade cotton this fall in wagon-load lots. If last year's prices in cotton and cottonseed are maintained, \$800,000 will thus be distributed through local channels of trade during the latter part of the year, all of which will have been secured by an investment of \$2500; further, this will be the means of not only establishing here a high-grade market for cotton, but it will also have the desirable effect of creating and maintaining a friendly relationship between the farmers and business men of Chickasha, several of the influential farmers of the country having already become members of the Chamber of Commerce.

Plans for a park and boulevard system have just recently been submitted by the civic improvement committee of the Chamber of Commerce. These plans include a 20-mile boulevard encircling the city, with a driveway of several miles on either side of the Washita River. The plan also embraces a series of small parks and playgrounds along the course of the boulevard, two or more of which are to be located along the river banks, where an 18-mile boating course is made possible by the building of the water-power dam. The plan submitted by the Federal Government when the city was founded has been followed out in the residential districts. The center of the streets are paved with asphalt, and there is a parkway on either side of the street, upon which trees have been planted and Bermuda grass sown.

Indicative of its belief in the future growth of Chickasha, the Rock Island Railroad has just completed here a handsome depot, the building of which cost nearly \$100,000. This company is also now constructing a viaduct across Choctaw avenue several blocks in length, thus eliminating the grade crossings through its railroad yards and thereby furnish safe access to the city for all who enter from the East. The Oklahoma Central Railway a short time ago built its own terminals into Chickasha, and is now about to build a new \$50,000 depot. These improvements give the shippers here direct connections with the Missouri, Kansas & Texas and the Santa Fe railroads, the two other great trunk lines entering Chickasha.

F. M. POSEGATE.

To Irrigate 30,000 Acres in Texas.

Reports state that Dr. F. S. Pearson, president of the Mexico Northwestern Railway, 20 Exchange Place, New York, will construct a system to irrigate 30,000 acres of land he owns in Uvalde county, Texas, the water supply to be obtained from the Nueces River and Turkey Creek. Referring to this, Dr. Pearson's representative wires the MANUFACTURERS RECORD that definite information cannot be announced until after Dr. Pearson's return from Europe in July. Last week the MANUFACTURERS RECORD announced details of Dr. Pearson's plan for the Medina Irrigation Co., a \$6,000,000 corporation he is organizing to irrigate 60,000 acres of land in Medina county, Texas.

PEANUTS IN OIL MILLS.

Suggestions from Marseilles for the Cottonseed Industry.

Managements of cottonseed-oil mills in the South who are studying the possibilities in the crushing of peanuts either as auxiliaries to cottonseed or as substitutes will be interested in the report on the peanut-oil industry at Marseilles, France, by United States Consul-General A. Gaulin. He says that the adaptation of cotton-oil mills to the peanut-oil industry can be accomplished at a moderate expense, and he gives the following estimate of the cost of the special equipment required in order to treat 50 metric tons of peanuts per day of 24 hours furnished by a Marseilles firm that makes a specialty of this type of machinery:

	Cost.
One "blutoir," or bolter, total length 4 meters (13.12 feet), complete.....	\$350 05
One decorticating machine, with 3 grooved rollers, and a ventilator to remove the stones and other foreign substances still adhering to the shells; a sieve for the separation of the hulls and kernels; another ventilator for the removal of the shells having passed with the kernels through the sieve, and pulleys.	868 50
One ventilator, with distributor, for the collection of the undecorticated peanuts having passed with the hulls.....	125 45
One sorting apparatus for the kernels remaining in the waste drawn off by the ventilator of the decorticating machine.....	250 90
One apparatus receiving the kernels from the foregoing and removing the stones and red skin, and separating besides the germs and coarse bran.....	250 90
One elevator to bring the nuts from the "blutoir" to the decorticating machine, 7 meters (22.96 feet) in height.....	140 89
One elevator to feed the apparatus handling the clean kernels.....	110 97
One elevator to feed the apparatus handling the waste.....	110 98
One endless screw to carry waste from the decorticating machine.....	77 20
One endless screw to carry the clean nuts from the "blutoir" to the decorticating machine.....	77 20
One aspirator for the entire installation.....	144 75
Driving gear for the entire installation.....	231 60
Total cost, delivered quay Marseilles.....	\$2939 39

The same installation with wooden frames and supports would cost \$2316. A crushing machine complete, with a capacity of 50 metric tons, could be had for \$874.20, divided as follows:

	Cost.
One hopper, with distributor, above crusher.....	\$67 55
One crusher, comprising 2 pairs of rollers, the first pair measuring 400 millimeters (1.31 feet) in diameter, and 600 millimeters (1.968 feet) in length, and the second pair 600 millimeters both in length and diameter.....	482 50
One "sasseur," or sifter, placed beneath the crusher, removing the foreign substances and classifying the meal.....	115 80
One aspirator connected with the rollers and the "sasseur".....	208 44

The presses and filters employed in cotton-oil mills are suitable for the peanut-oil industry.

During 1910 the arrivals of peanuts at Marseilles aggregated 348,016 metric tons from different countries. Peanut oil is highly rated in France as a salad and cooking oil, and is used extensively in the manufacture of margarin and by sardine packers. It is frequently mixed with olive and other vegetable oils, and the industrial grades obtained from the Indian nuts and from the second pressings of the African varieties are consumed mainly by the soap-making industry, although a certain proportion is also employed for illumination and for lubrication. Marseilles mills produced last year 170,000 tons of peanut-oil cake, which is used for cattle feeding, and about 80,000 tons are exported annually, chiefly to Germany and Scandinavia. Describing the industry, Consul-General Gaulin writes in *Daily Consular and Trade Reports*:

"Peanuts in the shell are never ground whole in the Marseilles mills. On the contrary, expression of oil is almost invariably preceded by a careful preparation of the nuts, particularly in the case of edible

oil. The peanuts are crushed only after having been cleaned and decorticated, and after every effort has been made to remove entirely the germs and the red skin covering the kernels. All these operations are done by machinery.

"The peanuts undergo a preliminary cleaning in a 'blutoir,' or rotary sieve; they are afterwards brought by an elevator to the decorticating machine and passed through grooved rollers, so adjusted as to husk the nuts without crushing the kernels. The separation of the husks and kernels is effected by ventilation. The germs, sprouts and red skin still adhering to the kernels after the husking process are stripped off by friction against the coarse-wired meshes of a rapidly oscillating sieve, the operation being completed by a ventilator connected with the apparatus. It is extremely difficult, however, to detach entirely the red cuticle from the kernels, and in the case of new-crop nuts it is said to be a practical impossibility.

"After the kernels have been cleaned they are ground by a crusher provided with two pairs of rollers. The mass emerging from the rollers falls into a 'sasseur,' or sifter, which separates the course from the fine meal, the remaining stones and other foreign substances having been eliminated by an aspirator. The coarse meal is reground.

"The meal is then put into hair bags called 'sourtins,' and subjected to hydraulic pressure, from 12 to 15 sourtins separated by metal plates being pressed at the same time. A sourtin contains about 10 kilos (22 pounds) of meal. The type of press employed in connection with this method is known as the 'presse Marseillaise.' Most of the presses of this type are worked under a pressure of 250 atmospheres, or 3675 pounds to the square inch, but a pressure of 500 atmospheres is not infrequent. A few of the leading Marseilles mills have adopted the Anglo-American 'cage press,' thus avoiding the use of sourtins. While the Marseillaise press crushes only from 1000 to 1100 kilos of nuts per day of 24 hours, the capacity of the Anglo-American cage press reaches 2000 to 2500 kilos.

"The first pressing, which furnishes the high-grade oil, is made without heating the meal. In other words, the meal is pressed cold. This pressing usually lasts about one hour. For the second pressing the sourtins are generally emptied, the meal reground and brought to a temperature of 30 degrees to 50 degrees C. (80 degrees to 122 degrees F.), according to the quality and condition of the nuts. The same amount of pressure is applied as for the first pressing, and the same press may be used. A smaller yield, but a finer grade, of oil results from the second pressing when the supplementary grinding of the meal is dispensed with. In some mills a third pressure is applied, but this is an unusual practice.

"The yield of oil varies according to the origin and condition of the nuts. The Senegal peanuts in the shell yield about 33 per cent. of their gross weight, the Gambia peanuts 31½ to 32 per cent. Both of these varieties yield from 21 to 23 per cent. on the first pressing and 10 to 11 per cent. on the second pressing. The average oil yield of the shelled peanuts is about 39 per cent. for the Indian nuts and 42 per cent. for the Mozambique. From 6 to 10 per cent. of oil, with an average of 8 per cent., remains in the cake. A bushel of shelled peanuts weighing 30 pounds should produce on the average about one and one-third gallons of oil (a little over a gallon on the first pressing) and 16½ pounds of cake, hulls not in-

cluded. These cakes are about two feet square by three-quarters inch thick.

"After running from the presses, peanut oil does not need refining, but is simply filtered. It is then fit for consumption as salad oil. Bleaching is resorted to only in order to produce the white oil required in the manufacture of margarin.

"Extraction of oil by solvents has not been found profitable in the case of peanut cakes, as these cakes are used exclusively, except when in a damaged condition, as a stock feed, and such solvents as sulphide of carbon and tetrachloride of carbon are considered harmful and depreciate the value of the cake for cattle-feeding purposes. Only a very limited quantity of peanut cake is ground into meal, and this always on special demand.

"The hulls are rarely if ever mixed with the cake, but they are largely used as fuel by the mill owners. They are also ground separately and disposed of as a by-product of small value. After grinding to meal they are worth from 3 to 3.50 francs (58 to 67 cents) per 100 kilos, packed in bags. Considerable quantities of this meal are shipped to England, where, it is stated, it is mixed with molasses in the manufacture of a compound cake which has lately come into favor as a stock feed. It is stated that the hulls are used to a certain extent in Germany as paper stock.

"The following is an official analysis of West African peanut cakes: Moisture, 9.72 per cent.; oil, 5.68 per cent.; fecula and digestible carbohydrates, 36.08 per cent.; protein, 40.05 per cent.; nitrogenous substances other than protein, 1.07 per cent.; crude fiber (not digestible), 3.86 per cent.; mineral substances, 3.54 per cent.

"As shown by this analysis, the peanut cake contains an extremely large percentage of nitrogen, which accounts for the fact that use of the meal in army and navy rations and by the working classes has been occasionally advocated."

The Birmingham Iron Market.

Birmingham, Ala., June 19.

[Special Cor. Manufacturers Record.]

In pig-iron we have had a quiet week, with only a few inquiries, and those only for actual needs. Our foundries are all fairly busy, but few running to full capacity. The "ups and downs" of the past few years in the iron market has pretty well killed the speculative spirit of most of our foundrymen, and the disposition to overbuy their actual needs on a low market has about died out. This to a certain extent helps to account for present conditions. Locally, for the past 60 days there has not been any great difference between the production and consumption. The resumption of the Tennessee Coal, Iron & Railroad Co.'s steel mill at Ensley and the probably resumption of our largest cast-iron pipe plant in next few weeks, after a shut down of several months, helps to clear the industrial situation locally very much. The district generally is feeling more optimistic. Our crop prospects are very fine, and building operations are normal. We are in the middle of our contracting season for the next 12 months' requirements for coal and coke among the railroads, cotton-oil mills and various other industries. A fair business has already been placed, and it is expected from inquiries in hand that contracts will be placed for a normal tonnage of both coal and coke by July 15. Competition is very close, and last year's prices are being generally shaded on all new business. Labor, raw materials and other conditions entering into the manufacture of pig-iron are considered favorable to the operator, and some very fine records are being made at the various plants.

While the market is considered firm at

\$10.50 for No. 2, it is a fact that in some exceptional cases \$10.25 has been made on that grade. We quote the following schedule as fairly representing the market today, all per gross ton f. o. b. furnaces this district: No. 1 soft and foundry, \$11; No. 2 soft and foundry, \$10.50; No. 3 foundry, \$10; No. 4 foundry, \$9.50; gray forge, \$9.50; mottled, \$9.25.

Foundries now running on cast-iron pipe report a fair amount of business booked, with enough additional orders in sight to keep them busy for balance of summer. The market is firm, with general quotations as follows: Four-inch to six-inch, \$22; 8-inch to 12-inch, \$21; over 12-inch, average \$20, with \$1 per ton extra for gas pipe.

The scrap-iron business is undergoing a long siege of dullness, with pig-iron so dull it is naturally quiet in these circles, with very little improvement looked for until the iron market shows some improvement, and the mills of the country running more nearly to their capacity. Present stocks cannot be disposed of now to any advantage. Local dealers are offering the following schedule of prices as fairly representing the old material market:

Old iron axles, standard, \$15.50 to \$16.
Old iron axles, small, \$13 to \$13.50.
Old steel axles, light, \$13 to \$13.50.
Old steel axles, standard, \$14 to \$14.50.
Old iron rails, \$13.50 to \$14.50.
No. 1 railroad wrought, \$11 to \$11.50.
No. 2 railroad wrought, \$8 to \$8.50.
No. 1 country, \$7 to \$7.50.
No. 2 country, \$6.50 to \$7.
No. 1 machinery, \$8.50 to \$9.
No. 1 steel, \$9 to \$9.50.
Standard car wheels, \$11 to \$11.50.
Tram car wheels, \$8 to \$8.50.
Light cast and stove plate, \$7 to \$7.50.

Southern's Good Roads Train.

Between June 26 and July 8 the road-improvement train being operated by the Southern Railway in co-operation with the national office of public roads will visit the following points in Tennessee: Cleveland, Athens, Sweetwater, Loudoun, Coal Creek, Harriman, Maryville, Luttrell, Jefferson, Greenville, Johnson City, Bristol, Rogersville, Morristown and Newport.

Portsmouth, Va.

The annual message of Mayor J. Davis Reed of Portsmouth, Va., together with municipal reports for 1910, has been published in pamphlet form, and gives an excellent survey of municipal activities on various lines. The principal public work done by the city last year was the completion of the Fifth ward sewerage at a cost of \$33,965, the construction of 1179 square yards of granolithic sidewalks and the laying of metal culverts.

Iron and Steel Merger.

A dispatch from New York states that the proposed Alabama Consolidated Coal & Iron Co. and Southern Iron & Steel Co. merger has been consummated, and that official details will be announced soon. It is stated that the new company will have an authorized capital of \$27,000,000, of which \$12,000,000 will be 6 per cent. preferred stock, and that bonds for \$5,000,000 will be issued.

Acidulating and Fertilizer Plant.

The Farmers' Cotton Oil & Fertilizer Co. of Huntsville, Ala., will increase capital stock to \$500,000 and add a fertilizer and acidulating plant. This addition to facilities will be ready for use next fall.

The Maryland Steel Co., at Sparrows Point, made the lowest bids for two more naval colliers for the Government, according to a dispatch from Washington.

WHAT IS YOUR TOWN DOING?

The MANUFACTURERS RECORD will be glad to receive from responsible correspondents in every town in the South brief items of news about business conditions and the opportunities for industrial enterprises. This information is desired for publication without cost of any kind to the sender, and regardless of whether the writer of the letter is a subscriber or not. The MANUFACTURERS RECORD accepts no paid matter in its reading pages. It seeks information of this kind from commercial and industrial organizations and from municipal authorities in every town and city of the South.

This department is open only to news facts of interest to investors, homeseekers and manufacturers. Communications of 200 or 300 words are likely to be given prompter publicity than more extended ones.

UNIVERSITY FOR GUTHRIE.

Chamber of Commerce,
Guthrie, Okla., June 17.

Editor Manufacturers Record:

The citizens of Guthrie have closed the contract and raised the necessary bonus which has secured for Guthrie the tri-State Methodist University. The Chamber of Commerce of Guthrie has been negotiating for this university for the past six months, and while at the beginning it was but an Oklahoma State institution, since our negotiations first began it has since become a tri-State university, Texas and New Mexico having amalgamated their schools with the Oklahoma University, with permanent headquarters at Guthrie. The former Epworth University, with headquarters at Oklahoma City, will be discontinued, and a new charter has already been taken out for the university at Guthrie; headquarters will be established here at once, and the entire faculty have either moved or are making preparations to move to Guthrie at once.

This will add approximately 5000 population to our city in the very near future, as the question of permanent location of the university is now settled for all time to come, and as we already have the Methodist hospital, which has a territory of a half dozen or more States, and three large Methodist churches. The citizens of Guthrie raised \$50,000 for building purposes, and gave an endowment of \$100,000 and a campus of 40 acres to secure the school, and the school has an additional endowment to this of approximately \$300,000. Bankable notes have been given to cover the entire building fund, and building operation for the new structure will commence at a very early date. A university development company has been formed and lots are now on sale.

We are authoritatively informed that a cement plant of Oklahoma has completed arrangements to establish a large warehouse here and has already secured several good-sized contracts for cement houses, etc., in the university addition.

W. A. RAYSON, Secretary.

USING THE RIGHT MEDIUM.

Board of Trade,
Greenville, S. C., June 12.

Editor Manufacturers Record:

Without question the MANUFACTURERS RECORD is being made of more value to the commercial secretary daily. I read the MANUFACTURERS RECORD with a great deal of pleasure, and find that it is of a great service to me in my work as secretary of the Board of Trade of Greenville, S. C.

Firstly, it gives me each week a sketch of what the other commercial organizations of the South are doing, and I get much valuable information from your columns that I am able to bring into my work to the advantage of Greenville.

Secondly, I have never been able to find another paper that treats the entire development of the South so interestingly as the MANUFACTURERS RECORD. At times it is absolutely necessary that I have figures of the growth of some certain industry or business in the entire South, and I always find this information in my file of the MANUFACTURERS RECORD. I use this information to ascertain the standing of

South Carolina in the Southern States. I get a great deal of pleasure out of the MANUFACTURERS RECORD, as I enjoy any story of progress. I am glad the MANUFACTURERS RECORD has placed a regular representative in South Carolina. I shall take pleasure in assisting him in any way possible as secretary of the local Board of Trade.

E. B. ADAMS, Secretary.

LEHIGH'S OPPORTUNITIES.

Commercial Club,

Lehigh, Okla., June 13.

Editor Manufacturers Record:

Within a radius of two miles of Lehigh is a population of 3000. It is situated in Coal county, 60 miles north of the Texas line. It is famous for its coal output, the Missouri Pacific or Western Coal & Mining Co. having three shafts in operation and a monthly payroll of \$50,000. Its No. 8 mine, costing \$140,000, is entirely of brick, stone and steel. The lease of this company covers only a meager part of the immense coal field of which Lehigh is situated in the center. Government shows 24,000 acres of coal land under lease and operation, producing over 1,000,000 tons annually, and 55,000 acres unleased and untouched. To this add industries, cattle, lumber, timber, farming, and you will get something near the resources of this city.

Lehigh's railroads are the Rock Island, Oklahoma Central, Missouri, Kansas & Texas and the Missouri, Oklahoma & Gulf, in operation over the Rock Island. There is now being surveyed a line of railroad from Hugo into the city of Lehigh.

The city has a municipal water and electric-light plant, and arrangements are now being made for their supply from a deep artesian well.

B. F. WILLIAMS, Secretary.

BRISTOL INDUSTRIES.

Board of Trade,

Bristol, Va.-Tenn., June 22.

Editor Manufacturers Record:

Tests are being made this week of the lime that is being burned at the plant of the Bristol Lime & Stone Co., located at Benham, seven miles from Bristol on the Virginia & Southwestern Railway. These operations have just been opened by Pittsburgh people, the officers being Albert Zacharias, president, and Wm. B. Bennett, treasurer, Pittsburgh. The plant is under the direct supervision of H. M. Gross, secretary, whose residence is Bristol. At present the plant is running a rock crusher with capacity of 500 tons daily and using one kiln turning out one car of lime per week. It is the purpose of the company to develop the property as rapidly as possible, and to this end more than \$40,000 have been already invested in the plant.

The Board of Trade has taken up with President J. G. Burchfield the matter of extending the Elizabethton, Milligan College & Johnson City Electric Railway from Johnson City on to Bristol. Construction work on 12 miles of the road is to start right away, and every effort will be made to have the line extended into this city, coming up one of the rich valleys between Johnson City and Bristol and opening to a high state of development a splendid country.

The Pittsburg Lumber Co. of Pittsburg,

operating at Elizabethton, near Bristol, has a large construction force at work extending a timber road to 7000 acres of land just purchased, and which is to be immediately developed. The new railway will be of standard gauge, and will cost \$400,000, using 90-pound steel rails and building the best quality of bridges. The locomotives to be employed are of 90-ton Baldwin type. F. M. RUNNELS, Secretary.

NATURAL GAS AT LAREDO.

Board of Trade.

Laredo, Tex., June 15.

Editor Manufacturers Record:

Laredo is making rapid strides forward. Several buildings have been constructed during the past few months, particularly the Richter building, erected at a cost of \$20,000.

Laredo held an election for a bond issue for school purposes. The issue carried almost unanimously, only three dissenting votes being cast.

Business over the railway lines is showing a big increase since the settlement of the Mexican Revolution. Considerable freight, such as machinery and supplies of all kinds, is now passing through to various industrial and mining companies in the republic. Passenger traffic, both north and south bound, is also showing an increase.

Laredo's commercial organization is making every effort to secure industries. Beginning the first of the year, natural gas was piped into Laredo from a point 28 miles distant. It is expected that natural gas, together with the great factors, cheap labor and an abundance of water, and raw materials in various forms, will eventually prove attractive to capitalists, and that the city will assume a position industrially commensurate with its standing as an agricultural district.

W. H. CONWAY, Secretary.

REVEALING MINERALS.

Commercial Club.

Coleman, Tex., June 14.

Editor Manufacturers Record:

While drilling for oil near this place a large flow of gas was struck that experts pronounce sufficient for fuel and lights for a large city. It seems unlimited, and has not been capped as yet. It means great things for this section in the way of cheap fuel.

A mountain of pure white glass sand, pronounced by experts to be as good as anything known yet, has been unearthed a few miles from Coleman.

A very fine deposit of pure brick shale, covering an area of 16 acres located on an elevation overlooking the town of Coleman, has just come to light, and is pronounced by brick men to be of the purest and best quality, especially for face and vitrified brick. O. JOHNSTON, Secretary.

LITTLE ROCK AND ARGENTA.

Board of Trade.

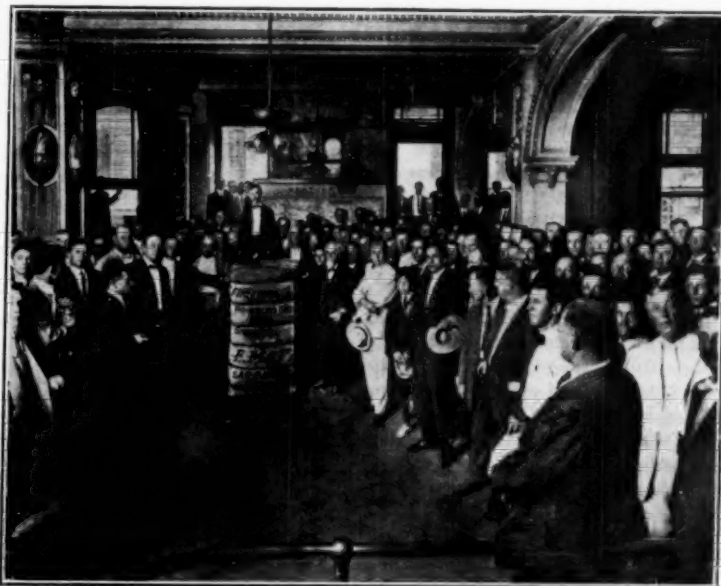
Little Rock, Ark., June 15.

Editor Manufacturers Record:

The growth of both Little Rock and Argenta during the year ended May 31, 1911, has been not only satisfactory, but phenomenal. The aggregate number of new enterprises in Argenta is 103 and in Little Rock 410, a total of 513 for the year for the two cities.

GEORGE R. BROWN, Secretary.

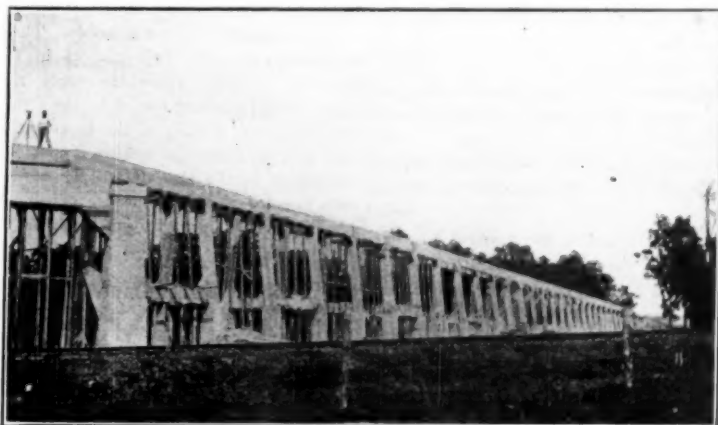
Detailed information about towns seeking manufacturing enterprises and offering specific advantages for development and business opportunities can be found under the head of "Classified Opportunities" on pages 80 and 81, and under "Cities, Towns and Railroads Inviting Factories" on pages 108, 109, 110 and 111.



FIRST BALE OF 1911 COTTON AT HOUSTON.

The Chamber of Commerce of Houston, Tex., made a signal event of the auction on the floor of the Cotton Exchange of the first bale of cotton of this season. The accompanying illustration shows the bale among the brokers. This bale, grown by E. Matz of San Benito, Tex., was ginned on June 9, and was sold at auction at the Houston Cotton Exchange on June 12 for \$1015 to Jesse H. Jones of Houston. The weight of the bale is 492 pounds. Mr. Jerome H. Farbar, director of publicity of the Houston Chamber of Commerce, in a letter to the MANUFACTURERS RECORD, states that this bale was ginned 11 days earlier than in any other recorded year, and brought the highest price ever paid for a first bale, and he adds:

"Incidentally in the production and marketing of this first bale of new crop cotton a third record was broken, being the first time a Brownsville train made, running special from San Benito to Houston, which had right of way over all trains on the St. Louis, Brownsville & Mexico Railroad. This haste was caused by reports of rival bales en route to Houston, but which failed to materialize. June 9 a report was received in Houston that a bale was being ginned at Rivera for shipment to Houston. Simultaneously came reports of other bales. At San Benito, however, where the first bale was actually being ginned, preparations were made to rush the bale to Houston. Following its ginning the bale was rushed to the station at San Benito in an automobile, where a special train was awaiting it. The bale was loaded into a passenger coach and the train was off. Nearly a mile-a-minute schedule was maintained, the bale reaching Houston early Sunday morning, June 11. At the station in Houston an automobile was waiting to rush the bale to the Cotton Exchange, where it arrived at 5:20 A. M. There it was found the haste was for naught, for the other competitive bales developed to be but myths. The cost of transportation was a little over \$350, or \$1 per mile."



COMPLETED PORTION OF SANTA FE VIADUCT.

Section of viaduct of the Galveston-Houston Interurban Railway under construction by the Stone-Webster interests, near the city limits of Houston, crossing the tracks of the Houston Belt & Terminal Railway, which is used by the various railroad lines entering Houston, and also across county road, 1900 feet long. Concrete trestle construction, with steel span 20 feet in length across railroad tracks. Extreme height at crossing, 37 feet, giving 23 feet clearance between lowest girder and railroad tracks. Three per cent. grade on one side of the span and 1½ and 3 per cent. combination on the other. The trestle piers rest on concrete slabs. An expansion joint is put in at a distance of every 100 feet. Bolts for the ties were cast in the concrete stringers every 45 inches, as poured. All the ties, stringers and bridge timbers used in the entire construction of the line between Galveston and Houston are creosoted, and were furnished by the Galveston Creosoting Co. Kahn bars were largely used, and all the material was purchased locally. Three thousand barrels of Lehigh cement went into the work. Stone & Webster Engineering Corporation has the work in charge. Pearson & Co., concrete experts of Houston, are subcontractors and are doing the work according to designs furnished by Pearson & Co. The entire cost of the work is about \$40,000.

FOR FOREIGN TRADE.

Observation of a Congressman—Manufacturer Abroad.

On his recent trip around the world, which was cut short by his being obliged to attend the extra session of Congress, Hon. William C. Redfield of New York, vice-president of the American Blower Co. of Detroit, Mich., wrote from Bombay, India, to his company, as follows:

"It is an oft-told tale that the American flag on merchant vessels has gone from the seas, and it is a fact that while I have seen two steamers carrying the flag of Sarawak and twenty with that of Portugal, I have not, since leaving Japan, seen an American flag. I am not so much concerned about this as a matter of personal pleasure or patriotic pride, but it has been brought home to me that it is a matter of serious loss. Not, I mean, loss merely to the transportation and shipbuilding business that is directly involved, but the far more serious loss that you yourselves suffer and all your fellow-manufacturers, and to which, amid your many cares, you have doubtless given little thought. In our American public discussion of this theme the ship builders and the ship owners and possibly our railways have been assumed to be parties concerned, and our general public has wasted little sympathy on them. But while these may be the direct interests involved, the indirect interests are vastly greater and more important.

"These indirect interests are you and your fellow-manufacturers in Detroit and in Chicago and St. Louis and elsewhere. You and they are poorer because the American flag is not seen on the high seas. You employ fewer men and use less machinery or work fewer hours and make less money because of that fact. This is what I want you not only to read, but to realize, to grasp and act upon.

"Suppose Detroit were so placed that every shipping line from it was owned and controlled by her business rivals. How could she then get trade away from Chicago or St. Louis or compete with them? For not only would every shipment Detroit made pay a profit to these rivals, but the time and speed and frequency of the shipments would depend on their wills. Detroit might in such case, by the energy of her men and by their initiative and astuteness, still do a good trade, but you will agree with me that the condition I sketch would be a serious, nay, a disastrous, handicap.

"Now, this is the substantial fact as regards the foreign trade of the United States. We must have that foreign trade. To lose it would be a disaster. But almost every box and bale sent abroad not alone pays tribute to a rival's purse (which is the least of it), but—and here is the grave fact—the course that box or bale travels, the provision of sufficient and frequent means of sending it at all, these, all these, are not only in the hands of your business rivals, but are deliberately and skilfully used in their favor and to your business injury. True, some lines want our trade, and say they cater to it, but no English or German line but will give preference to its own nationals, and there is almost no one to give preference to Americans.

"When I sold an engine in Rangoon I was told there was a three weeks' handicap in time against us as compared with England, and that our engines would have to go to Birkenhead and be transferred there. There were no American ships regularly sailing to Rangoon, and no way in which you could avoid the handicap of three weeks' time and an extra freight charge. Fortunately, the excellence of our engine got us a start, but the handicap is there, working while you sleep. And this same handicap ties itself to a more or less de-

gree to every quotation made abroad by every American manufacturer.

"I do not write in advocacy of any special form or measure of relief, but only to do certain simple things, viz.: (1.) To bring the facts home to those most interested. (2.) To suggest that it is high time the 'age of talk' ended and the 'age of action' began.

"Cannot we be patriotic and wise enough to drop this, that or the other preference and agree on something that will give to our manufacturers and their workmen the share of the world's trade to which they are entitled? This would be a righteous and a reasonable protection."

The directory of the Louisiana Sugar Planters for 1911 has been published by the *Modern Sugar Planter* of New Orleans. It gives the names, postoffice addresses, character of plant and the areas cultivated in cane of sugar manufacturers and cane-growers by parishes in the State. All manufacturers of sugar, and the larger ones who only grow cane are included in the publication, and the capacity, location and freight-receiving address of every factory are given.

Virginia has 13 factories for the conversion of menhaden or alewife fish into oil and fertilizer. In these factories more than \$2,000,000 is invested, and their aggregate payroll is about \$1,600,000 a year. They employ 56 steamers and about 2200 men.

The total production of gold in the Southern Appalachian States between 1800 and 1900 amounted to \$47,000,000. Between 1828 and 1900 between \$16,000,000 and \$17,000,000 of gold was produced in Georgia, the greater proportion by the mines of Lumpkin county.

The report of the Sanitary and Drainage Commission for Charleston county, South Carolina, for 1910, Mr. W. H. Welch, chairman, has been printed in pamphlet form, with illustrations showing the gratifying changes made through drainage and road-building.

The Georgia Association of Cotton Oil Mill Superintendents at its meeting at Rome last week elected Messrs. J. T. Holmes, Blakely, president; W. J. Yarbrough, Macon, vice-president, and J. W. Hanson, Hawkinsville, secretary and treasurer.

The Board of Trade of Jackson, Miss., J. B. Lusk, secretary, is circulating leaflets giving in condensed form valuable facts about Jackson and its vicinity as location for manufacturing plants and for agriculture.

The National Rivers and Harbors Congress, Hon. Joseph E. Ransdell, president, and J. F. Ellison, secretary, is circulating an interesting brochure by S. A. Thompson dealing with waterways as creators of prosperity.

The Chamber of Commerce of Fayetteville, N. C., Z. P. Smith, secretary, is circulating a pamphlet giving facts and figures about the advantages of the community.

The Board of Trade of Asheville, N. C., N. Buckner, secretary, is circulating a handsomely illustrated booklet descriptive of many attractions of that North Carolina highland city.

F. W. Field of the British Board of Trade at Toronto estimates that \$417,143,221 of American capital is invested in Canada.

The annual report of the Harbor Board of Baltimore city has been published in pamphlet form.

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Albany, Ga.—City voted \$5000 bond issue for new streets and \$12,500 for street paving.

Belton, Mo.—City voted \$10,000 bond issue for macadamizing business streets.

Mars Hill, N. C.—Mars Hill township voted \$10,000 toward construction of central highway.

St. Petersburg, Fla.—City voted \$35,000 bond issue for brick paving and \$5000 for street crossings.

Bonds to Be Voted.

Oglethorpe, Ga.—Macon county will vote on \$150,000 bond issue for road construction.

Chickasha, Okla.—City votes in July on \$25,000 bond issue for constructing park and boulevard system.

Burgaw, N. C.—Pender county votes July 25 on road improvements.

Palatka, Fla.—City votes July 11 on \$15,000 bond issue for street paving.

Rosenberg, Tex.—City votes June 26 on \$75,000 bond issue for building roads.

Sumter, S. C.—Sumter county votes August 1 on \$150,000 bond issue for road improvements.

Contracts Awarded.

Fort Worth, Tex.—City awarded contract for about 14,370,000 square yards of bitulithic paving.

Franklin, La.—Washington parish awarded contract at \$75,000 for maintaining 300 miles of roads for three years.

Jackson, Miss.—City awarded contract at about \$47,000 for asphalt paving.

Lexington, Ky.—City awarded contract at about \$130,000 for asphalt and vitrified brick paving.

Louisville, Ky.—City awarded contract for nine blocks of paving.

Morristown, Tenn.—Hamblen county awarded contract for road construction.

Portsmouth, Va.—Norfolk & Portsmouth Traction Co. awarded contract at about \$40,000 for paving between and on each side of tracks, etc.

Sumter, S. C.—City awarded contract for 12,000 square yards of vitrified brick paving.

Temple, Tex.—City awarded contract for vitrified brick paving on 10 blocks of streets.

Contracts to Be Awarded.

Austin, Tex.—Travis county receives bids until June 26 for grading and macadamizing roads.

Baltimore, Md.—City receives bids until June 28 for grading, curbing and paving with sheet asphalt on several streets.

Bennington, Okla.—City will construct 12 blocks of 12-foot and 16 blocks of 4-foot cement sidewalks.

Bonham, Tex.—City receives bids until July 16 for constructing about 4538 feet of concrete curb, 22,645 square yards of paving, 1000 square yards of grading, etc.

Fort Worth, Tex.—City receives bids until June 29 for about 7,466,000 square yards of paving.

Charlotte, N. C.—City receives bids until July 5 for about 58,400 square yards of paving.

China Grove, N. C.—Rowan county opened bids June 17 for constructing 4¾ miles of road.

Como, Miss.—City receives bids until July 4 for constructing 25,000 yards of concrete sidewalks and crossings.

Lexington, Tenn.—Henderson county will construct road.

Crowley, La.—City receives bids until July 6 for constructing 300,000 square feet of concrete sidewalks.

Marlington, W. Va.—Pocahontas county receives bids until June 27 for constructing roads.

Norfolk, Va.—Government receives bids until July 9 for constructing concrete walks at Navy-yard.

Richmond, Va.—Henrico county receives bids until July 1 for constructing 7½ miles of roads.

Rutledge, Tenn.—Grainger county receives bids until July 1 for constructing 16½ miles of road.

Tarboro, N. C.—City receives proposals until July 7 for about 25,000 square yards of paving.

Vicksburg, Miss.—City receives bids until July 3 for paving on two streets.

Washington, D. C.—District Commissioners receive bids until June 29 for grading and improving suburban streets and avenues.

Washington, D. C.—Department of Agriculture, Good Roads Division, will construct experimental roadway, for which \$10,000 has been appropriated.

Horseshoe Drive for Asheville.

[Special Cor. Manufacturers Record.]

Asheville, N. C., June 19.

One of the projects for better roads for Asheville is the horseshoe drive, four miles long, which is contemplated on the part of several of the leading citizens. At the widest point driveway will be 60 feet, while the narrowest point will be 40 feet. This will give automobilists an opportunity to drive along in pairs all the way around the foot of the mountains, and pass each other with ease. At no time will the grade exceed 4 per cent. It will be designed for the special use of the many thousands of tourists that visit Asheville during the season in the way of motoring, driving, etc. Work will begin this summer, and it is probable that it will be completed by the fall months.

It is the idea of the promoters of this project, foremost among whom are Dr. C. V. Reynolds, Messrs. D. C. Waddill, C. C. Millard and others, to lay out for the benefit of Asheville and Western North Carolina pleasure seekers one of the finest macadam drives obtainable. These gentlemen are the main owners in the property through which the route will pass, aside from that owned by the Country Club, and in view of the fact that it will open up property, making it so easily accessible to the city, it will be turned into use for residential needs. The people of Asheville are very much pleased at the prospect.

ROY G. BOOKER.

Fort Worth Street Improvements.

Referring to his city's street improvements, A. M. Campbell, Jr., paving engineer of Fort Worth, writes to the MANUFACTURERS RECORD that paving contracts have been awarded for nearly 137,000,000 square yards of bitulithic, over 82,000,000 square yards of sheet asphalt and over 19,500,000 square yards of brick.

A \$47,000 Paving Contract.

A contract amounting to about \$47,000 has been awarded for asphalt paving on two residence streets in Jackson, Miss. The Southern Asphalt Co. of Birmingham received this contract. This is an instance of progressiveness in modern street improvements by a Southern city.

Asphalt Streets Costing \$130,000.

Among the Kentucky cities not neglecting their streets is Lexington, which has awarded contracts amounting to \$130,000. These contracts were awarded to Carey & Reed of Philadelphia, and provide for asphalt paving.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

B. & O. IN KENTUCKY.

Associated in Building New Coal Road With the Consolidation Company.

Concerning a telegram from Cincinnati that the Baltimore & Ohio Railroad recently made a survey from Shelby to Ashland, Ky., to connect at Ironton, O., with the Cincinnati, Hamilton & Dayton Railway, which it now controls, it is understood that the sole foundation for this rumor is that the Baltimore & Ohio is associated with the Consolidation Coal Co. in the building of the railroad now under construction from Shelby to the new coal fields of the Consolidation via Shelby Gap and Potter Gap, about 30 miles, which will assure considerable traffic to the Baltimore & Ohio, the coal to be handled from Shelby over the Chesapeake & Ohio Railway to the Ohio River, which latter road already delivers much business to the Baltimore & Ohio. It is further understood that there is no intention of building a road which would practically parallel the Chesapeake & Ohio's Big Sandy division, as, in view of the relations herein mentioned, it would be unnecessary.

Shelby, Ky., where the new railroad of the Consolidation Coal Co. begins, is a station on the Big Sandy division of the Chesapeake & Ohio Railway about 120 miles south of Ashland and Ironton, which are on the Ohio River near each other. The line is chartered as the Sandy Valley & Elkhorn Railway, and its route is generally southwest. It may be surmised, because of the traffic relations between the Baltimore & Ohio and the Chesapeake & Ohio roads, that the latter's contemplated extension into the State of Ohio will be indefinitely postponed, as the Cincinnati, Hamilton & Dayton road furnishes a direct route to the Great Lakes, and can handle any coal traffic which the Chesapeake & Ohio may turn over to it for lake shipment. Nothing has been heard for some time about the Ohio extension plans, which called for the building of a line through territory served by the Cincinnati, Hamilton & Dayton road. It also appears that the Baltimore & Ohio would not have engaged in the construction of an expensive coal railroad so remote from its main line if it were not sustained by the assurance of a strong position with respect to its connections. So long as they are maintained it does not seem that the surveyed route through the eastern part of Kentucky will be built upon.

In connection with this new development it is important to note the recent reports of closer relations between the Carolina, Clinchfield & Ohio Railway and the Chesapeake & Ohio, which, according to rumor, have reached an agreement for the shipment of coal from the Clinchfield region as soon as a connection with the Chesapeake & Ohio is built. When this is constructed the Clinchfield will gain an outlet to the Great Lakes and the Chesapeake & Ohio will secure an outlet to a South Atlantic port at Charleston, S. C.

NASHVILLE & GALLATIN.

Contract May Be Let This Week for Another Electric Interurban in Tennessee.

President H. H. Mayberry of the Nashville & Gallatin Railway Co., Nashville, Tenn., is quoted as saying that A. M. Stainer, chief engineer, has completed plans and specifications for the proposed road, which will be about 30 miles long, and it is expected to let contracts as soon

as the papers are checked up and approved, which will be in a few days, so that the award may be made this week. The company will endeavor to have the entire road completed and in operation within 14 months or less from July 1.

The Fidelity Securities Corporation, which is to build the line, has increased its capital to \$300,000 and the number of directors from five to nine, the board now consisting of V. J. Blow of Hiram Blow & Co., N. S. Keith of the Cincinnati Trust Co., Harry W. Davis of the Delaware Trust Co., W. H. Netherland of Commercial Bank & Trust Co. and South Louisville Bank; R. A. Bailey, Sr., of the Harpeth National Bank; Shelby Gish, gas and coal operator; Judge John A. Pitts of Pitts & McConico, H. H. Mayberry, president; R. A. Bailey, Jr., secretary and treasurer.

NEW LAKES-TO-GULF LINE.

Traffic Agreement Between New York Central and Louisville & Nashville Railroad.

Dispatches from Chicago announce that a traffic agreement has been signed between the New York Central lines and the Louisville & Nashville Railroad, establishing a Great Lakes-Gulf of Mexico route, which will be of extensive advantage to both companies.

It is further stated that the Chicago, Indiana & Southern Railroad, which is one of the New York Central roads, announces that it will operate its first train from Chicago over its new extension into Evansville, Ind., on July 1, connection being made there with the Louisville & Nashville.

A telegram from the headquarters of the New York Central in New York says that its Big Four Route built the extension into Evansville, and the new line will be opened on the date mentioned. A press report, also from New York, says that the traffic alliance between the two roads will take effect then, including both freight and passenger service, which will be interchanged via Evansville.

There are expectations that this will result in the operation of through trains between Chicago and New Orleans, and also to other Southern cities, although no official announcement has been made as to details.

SANTA FE'S NEW LINE.

Route Across Texas Gives Shorter Time Between the Gulf and the Pacific

The Santa Fe system, says a dispatch from Coleman, Tex., has laid the last rails on its new line from Sweetwater to Lubbock, Tex., thus completing a through route from Coleman to Canyon City, which can be used for trains between the Gulf of Mexico and the Pacific Coast until the cut-off from Lubbock to Texico is finished, which will be in the autumn. Announcement has not yet been made as to when through trains will be put on.

Improvements at Spencer, N. C.

E. H. Coapman, vice-president and general manager of the Southern Railway, has just made public particulars of the extensive improvements which are being made by the company at Spencer, N. C. This includes a pumping station at Yadkin River, a new boiler shop and a storehouse and office building. At the pumping station, which is about three miles north of Spencer, there are being installed twin, volute, turbine pumps driven by steam turbine engines and a 250-horse-power boiler. At Spencer there is being built a steel tank of 200,000 gallons capacity on a steel frame, together with the pipes necessary to connect it with the pumping station. This improvement will furnish a water supply adequate for shop and road purposes, as

well as for fire protection for the whole plant at Spencer.

The boiler shop will be a steel frame and brick building 100x210 feet, and about 40 feet high, with a riveting tower at one end. Its equipment will include traveling cranes, riveting machine and all other tools and machinery incidental to a well-equipped modern boiler shop.

The storehouse and office building made necessary by a demand for increased facilities will be of brick, 200x50 feet, two stories high, with elevator, steam heat and electric lights. The platform for the storage of castings will be removed and rebuilt to a size of 66x325 feet, with 2470 feet of connecting track.

New Equipment, Rails, Etc.

The Queen & Crescent Route is reported in the market for more than 1000 freight cars.

The Louisville Railway Co., Louisville, Ky., has ordered 30 double-truck cars from the Cincinnati Car Co.

The Atlantic Coast Line is reported to have gotten prices on 1500 tons of bridge steel. It has also ordered a Scherzer lift bridge of 200 tons.

The Kansas City Southern Railroad is reported placing an order for 14,000 tons of rails.

The Jacksonville Terminal Co., Jacksonville, Fla., has ordered a six-wheeled switching locomotive from the Baldwin Locomotive Works, Philadelphia.

The Baltimore & Ohio Railroad is reported in the market for 3500 tons of bridge steel.

The Columbia (S. C.) Electric Street Railway, Light & Power Co. has ordered six semi-convertible pay-as-you enter cars from the J. G. Brill Company, Philadelphia.

The Winnipeg, Salina & Gulf Railway Co., Salina, Kans., is reported to have ordered from the Beaumont Lumber Co., Beaumont, Tex., 300,000 ties to be delivered at Oklahoma City, Okla., beginning August 15, for a line from there to Okeene.

Putting in Passing Tracks.

Extensive improvements are now being made on the Knoxville division of the Southern Railway between Knoxville and Chattanooga, Tenn., and also between Morristown, Tenn., and Asheville, N. C. The construction of 10 passing tracks has already begun, with the intention of completing them at an early date. This will greatly increase the facilities of the division for both freight and passenger trains. The tracks are known as interlocked lap sidings. Taken in connection with double track existing between Morristown and Knoxville and from Chattanooga to Ooltewah, these improvements under way will give the division much faster service, accompanied by greater safety, besides providing for increase of business in the future. The sidings are being laid at the following points: Ebenezer, Loudon, Regan, Hutsell, Sanford, Roe Junction, Philadelphia, Sweetwater and Tasso, in Tennessee, and Paint Rock, N. C.

B. & O. Figures for May.

The Baltimore & Ohio Railroad Co.'s statement of earnings and expenses (exclusive of outside operations) for May, 1911, as compared with May, 1910, shows gross earnings, 1911, \$7,518,036; 1910, \$7,777,710; decrease, \$259,674. Expenses, 1911, \$4,970,224; 1910, \$5,647,170; decrease, \$767,946. Net earnings, 1911, \$2,547,812; 1910, \$2,130,540; increase, \$417,272.

For the 11 months of the fiscal year as compared with the corresponding period of 1910, the statement shows gross earnings, 1911, \$80,683,295; 1910, \$80,812,-

497; decrease, \$129,202. Expenses, 1911, \$57,566,088; 1910, \$55,793,550; increase, 1,772,538. Net earnings, 1911, \$23,117,207; 1910, \$25,018,947; decrease, \$1,901,740.

Birmingham to Vicksburg.

One of the interested parties sends information concerning the proposed Birmingham & Vicksburg Railroad as follows: The route contemplated is from Birmingham, Ala., via Tuscaloosa, Ala.; Shuqualak and Canton, Miss., to Vicksburg, Miss., 264 miles, this being through slightly rolling country for the greater part. The parties concerned are H. H. Stadeker and L. J. Stadeker, 22 Fifth avenue, Chicago, Ill.; John Wohner, D. Levy, W. L. Dinkins, P. Trolie, A. Tuteur, Isidor Gross and Emile Levy of Canton, Miss., and B. L. Roberts of Sandusky, O. Mr. Gross is vice-president, Mr. Wohner treasurer and Mr. Levy secretary. S. R. Ballard is chief engineer. Nothing is said concerning the report that the line has been financed in Paris.

Double-Decked Pier for Mobile.

A dispatch from Mobile, Ala., says that R. V. Taylor, vice-president and general manager of the Mobile & Ohio Railroad, announces that, jointly with the Southern Railway, it will build a double-decked pier at the foot of Adams street, and that work upon the improvement, which will add 1200 feet to the dockage room of the railroads, will begin as soon as the contract can be awarded. The pier will be equipped with elevated tracks, so that the contents of cars can be loaded into ships by gravity. The improvement will cost about \$300,000.

Proposed Cut-Off.

An officer of the Houston & Texas Central Railroad (Southern Pacific system) says that the proposed line from Stone City will be built to either Lincoln or Giddings, Tex., 40 miles. Date is not yet fixed to receive bids for the grading, but the bridges have been contracted for. The route is through a rolling, farming country. It crosses the Gulf, Colorado & Santa Fe Railway between Caldwell and Davidson. T. Fay is general manager and E. B. Cushing chief engineer of construction, both at Houston, Tex.

To Issue Construction Bonds.

A letter from Crory, Ark., says it is reported that the McCrory & Beedeville Southern Railway Co. will issue \$50,000 of construction bonds. This is a short line railroad connecting at Jels with the Rock Island system and at McCrory with the Iron Mountain (Missouri Pacific), but proposes to connect north of Beedeville with the Frisco system. Clayton Hailey is president and R. B. Keating secretary-treasurer, both at McCrory.

Samuel Spencer Memorial.

A handsomely printed and bound volume in memory of the late Samuel Spencer, the first president of the Southern Railway Co., and descriptive of the exercises at the unveiling of the monument to him, which was erected by the employees of the road last year in Atlanta, Ga., has been issued by the general committee, of which J. W. Connelly, Washington, D. C., is chairman. The book also contains an excellent likeness of Mr. Spencer and a sketch of his life. To everyone who knew him—and they number thousands—it will be of especial interest.

Elberton & Eastern Chartered.

Dispatches from Atlanta, Ga., announce the incorporation of the Elberton & Eastern Railway Co. to build a line about 50 miles long from Elberton, Ga., which is on the Seaboard Air Line, via Washington to

Lincolnton, Ga., touching Tignall and other points. It will provide transportation facilities for parts of Elbert and Wilkes counties, and also for Lincoln county, which now has no railroad. Headquarters will be at Elberton, and the authorized capital stock is \$500,000. The incorporators are W. O. Jones, W. F. Anderson, J. H. Blackwell, L. M. Heard and R. L. Cauthen and Z. B. Rogers of Elberton, Ga.; W. J. Adams, J. J. Wilkinson and J. A. Moss of Tignall, and M. A. Pharr of Washington, Ga.

Birmingham & Northwestern.

Mike Harvey, chief engineer of the Birmingham & Northwestern Railway, Jackson, Tenn., reports progress of construction thus:

"Grading 20 per cent. completed, contract beginning April 1 and calling for completion in six months after date of signing. Timbers for trestle-work being delivered on the line, pile-driving for which will begin within a week.

"According to progress at the present time, construction will be completed on or before date of expiration of contract. Taken altogether, progress has been remarkably satisfactory."

Railroad Notes.

The Moline Timber Co., Moline, Ark., says concerning the proposed railroad that the Rock Island Railroad will do the work, the timber company having nothing to do with it.

An officer of the Frisco system says that the work on the proposed terminal improvements at Bellevue, near Memphis, Tenn., will be completed about July 15, and not later than August 1.

A. M. Dumay, Washington, N. C., says that the Mattamuskeet Railroad, to be built from Washington to Fairfield, N. C., J. F. Tayloe of Washington, president, will require 4 locomotives, 4 coaches, 2 combination baggage and express cars, 10 box cars and 20 flat cars.

A telegram from Georgetown, Tex., says that the sale of the Bartlett & Florence Railroad has been approved by the court, the purchasers at the receiver's sale being J. L. Bailey, C. J. Granger, J. W. Jackson and others, and the price was \$41,000. It is said that the line will be extended from Jarrell to Florence and from Bartlett to Rockdale.

C. M. Barnes, Marston, Mo., writes that construction on the St. Louis & Missouri Southern Railway is progressing. Track-laying has begun between Marston and New Madrid, 60-pound rails being put down, and the eight miles of grade already prepared will be in operation by July 10. The road will be extended north to Thebes Bridge, and south, probably to Little Rock, Ark.

Contract for Wireless Towers.

The Baltimore Bridge Co. of Baltimore has received contract to construct three towers for the naval wireless station at Arlington, Va. One tower will be 600 feet high, and the others 450 feet high, supported on steel bases and concrete foundations. They will be arranged in the form of an isosceles triangle, and about 900 tons of steel will be used in their construction. The plant is to be equipped for sending messages from 2000 to 3000 miles. Near the main tower there will be erected a two-story 40x150-foot brick and terra-cotta fireproof building to contain 10 rooms, the main transmission room to be equipped with a 10,000-kilowatt machine driven by electricity from a local transmission or in emergency by oil engines. Next week bids will be opened for constructing this building.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

COTTON GOODS IN 1909.

Marked Progress Made in the Industry Since 1899.

In 1909, according to the Census Bureau, cotton mills in the United States turned out more than 6,000,000,000 square yards of fabrics, and the value of their product was \$616,297,000, an increase of 85 per cent. over the value of \$332,806,000 in 1899. The figures of 1909 do not include \$13,080,000, the value of cotton small wares, or \$6,805,000 worth of cotton twine, cordage and rope.

The quantity of cotton consumed increased from 1,814,003,000 pounds in 1899 to 2,332,569,000 pounds in 1909, a gain of 29 per cent., while the cost of this cotton increased from \$124,905,000 to \$274,402,000, or 120 per cent. The proportion of foreign cotton used in 1899 and in 1909 was practically the same, being 55,845,000 pounds, or 3.1 per cent. of the total, in the former year, and 76,199,000 pounds, or 3.3 per cent., in the latter. Much the greater portion of the foreign cotton consumed was Egyptian, which is used extensively in the manufacture of thread and cotton yarns. Small quantities of Indian, Chinese and other cottons were also used.

The amount of cotton waste, purchased as such for use, almost doubled during the decade, being 40,835,000 pounds in 1899 and 79,419,000 pounds in 1909. The cost increased from \$1,513,000 to \$4,167,000. Formerly large quantities of cotton waste were exported to Europe and used there in the manufacture of cheaper grades of goods, but the installation of machinery adapted to its use, together with the high price of cotton, has increased the consumption of this material both in cotton mills and in hosiery and knit-goods factories.

Cotton yarn purchased increased from 83,832,000 pounds to 108,869,000 pounds during the decade, a gain of 30 per cent., while the cost increased from \$15,750,000 to \$29,909,000, or 90 per cent. The installation of weaving departments in mills formerly engaged exclusively in the manufacture of yarns is responsible for the comparatively small increase in the quantity of yarns purchased as such. The relative gain in the quantity of silk yarns used was large, and their value increased from \$1,784,000 in 1899 to \$5,776,000 in 1909. Other yarns purchased decreased during the decade, the quantity in 1899 being 3,297,000 pounds, costing \$1,113,000, while in 1909 it was 3,120,000 pounds, costing \$1,691,000. The cost of starch, chemicals and dyestuffs was returned in 1899 at \$6,895,000, while in 1909 it was \$6,939,000.

The progress of the industry during the decade was marked, the increase in the total value of products manufactured, as before stated, being 85 per cent., and while the percentage of increase in the quantity of products was not nearly so large, the aggregate was considerable and distributed generally throughout the list. Plain cloths for printing or converting increased from 1,581,614,000 square yards, valued at \$57,781,000, in 1899, to 2,437,967,000 square yards, valued at \$121,341,000, in 1909, a

gain of 54 per cent. in quantity and 110 per cent. in value.

There were 1,212,403,000 square yards of brown or bleached sheetings and shirtings manufactured in 1899 and 1,307,958,000 square yards in 1909. The increases made in the manufacture of twills and sateens, fancy woven fabrics and ginghams were all very large, being 65, 80 and 93 per cent., respectively. In 1909 there were manufactured 388,315,000 square yards of twills and sateens, valued at \$34,274,000; 427,769,000 square yards of fancy woven fabrics, valued at \$47,666,000, and 536,443,000 square yards of ginghams, valued at \$37,801,000.

Duck produced increased during the decade from 129,234,000 square yards, valued at \$14,263,000, to 163,487,000 square yards, valued at \$27,888,000, a gain of 26 per cent. in quantity and 95 per cent. in value. The quantity of both drills and cottonades manufactured decreased during the decade, but on account of the higher range of values in 1909 both show increases in value. In 1909 there were 215,580,000 square yards of drills manufactured, valued at \$16,265,000, and 25,676,000 square yards of cottonades, valued at \$3,344,000.

Ticks, denims and stripes produced in 1909 amounted to 264,175,000 square yards, valued at \$27,288,000, a gain during the decade of 54 per cent. in quantity and 66 per cent. in value. Napped fabrics, with 305,656,000 square yards in 1909, valued at \$25,695,000, show an increase of 14 per cent. in quantity and 41 per cent. in value during the decade. The quantity of corduroy, cotton velvet and plush much more than doubled, being 7,962,000 square yards in 1899 and 19,706,000 square yards in 1909. The value of this product increased from \$2,682,000 to \$6,966,000, or 160 per cent.

The total quantity of upholstering goods increased during the decade from 51,280,000 square yards, valued at \$8,671,000, to 100,325,000 square yards, valued at \$15,996,000, an increase of 96 per cent. in quantity and 84 per cent. in value. The increase is attributable almost entirely to the item of lace and lace curtains, which was returned in 1899 at 37,825,000 square yards, valued at \$3,585,000, and at the census of 1909 at 85,350,000 square yards, valued at \$9,725,000, a gain of 126 per cent. in quantity and 171 per cent. in value. In 1889 the value of these goods manufactured was only \$1,225,000. The progress in this branch of the industry has been remarkable, and bids fair to continue. In 1899 there were 32,740,000 square yards of cotton bags and bagging manufactured in this country, while in 1909 the amount was 52,694,000 square yards, an increase of 61 per cent.

Cotton yarn manufactured for sale is one of the largest single items shown under "Products." In 1899 there were 332,186,000 pounds of cotton yarn, valued at \$53,189,000, produced for sale, while the corresponding figures in 1909 were 470,221,000 pounds, valued at \$109,219,000, an increase of 42 per cent. in quantity and 98 per cent. in value. These yarns are spun for a variety of uses and are disposed of largely to other cotton mills and to manufacturers of woolen, silk, and hosiery and knit goods. In 1909 the quantity of thread manufactured was 23,701,000 pounds, valued at \$20,516,000, showing an increase of 51 per cent. in quantity and 73 per cent. in value.

There were 13,600,000 pounds of cotton twine, valued at \$2,397,000, manufactured in cotton mills. This, however, does not, as previously stated, represent the entire quantity manufactured in the country, as large quantities were returned by establishments engaged exclusively in the produc-

tion of these goods. Batting and wadding manufactured in cotton mills during the census year amounted to 10,626,000 pounds, valued at \$1,472,000, while cotton waste not used for further manufacture by the establishments producing it amounted to 309,298,000 pounds, valued at \$10,834,000.

000. All other products amounted to \$14,557,000.

The following statements give the number of establishments, quantity and cost of principal materials used, and quantity and value of the different products returned, for 1909, 1904 and 1899:

Cotton Goods—Number of Establishments and Quantity and Cost of Principal Materials Used, 1909, 1904 and 1899.

Item.	1909.	Census 1904.	1899.	Per cent. of increase, 1899-1909.
Number of establishments.....	1,306	1,077	973	24
Principal materials, total cost.....	\$322,884,000	\$255,456,000	\$151,960,000	112
Cotton:				
Domestic—				
Pounds.....	2,256,570,000	1,829,374,000	1,758,158,000	28
Cost.....	\$261,203,000	\$214,225,000	\$118,834,000	120
Foreign—				
Pounds.....	76,199,000	43,700,000	55,845,000	36
Cost.....	\$13,199,000	\$7,587,000	\$6,071,000	117
Waste:				
Pounds.....	78,419,000	76,523,000	40,835,000	94
Cost.....	\$4,167,000	\$3,802,000	\$1,513,000	175
Yarn:				
Cotton—				
Pounds.....	108,869,000	91,595,000	83,832,000	30
Cost.....	\$29,909,000	\$21,601,000	\$15,750,000	90
Silk—				
Pounds.....	1,921,000	370,000	507,000	279
Cost.....	\$5,776,000	\$1,146,000	\$1,784,000	224
Other—				
Pounds.....	3,120,000	2,729,000	3,297,000	5
Cost.....	\$1,691,000	\$1,056,000	\$1,113,000	52
Starch, chemicals and dyestuffs, cost..	\$6,939,000	\$6,029,000	\$6,895,000	1

*Decrease.

Cotton Goods—Products, by Kind, Quantity and Value, 1909, 1904 and 1899.

Item.	1909.	Census 1904.	1899.	Per cent. of increase, 1899-1909.
Total value.....	\$616,297,000	\$442,451,000	\$332,806,000	85
Plain cloths for printing or converting:				
Square yards.....	2,437,967,000	1,818,216,000	1,581,614,000	54
Value.....	\$121,341,000	\$80,312,000	\$57,781,000	110
Brown or bleached sheetings and shirtings:				
Square yards.....	1,307,958,000	1,172,309,000	1,212,403,000	8
Value.....	\$80,318,000	\$61,253,000	\$55,513,000	45
Twills and sateens:				
Square yards.....	388,315,000	266,143,000	235,861,000	65
Value.....	\$34,274,000	\$23,701,000	\$14,301,000	140
Fancy woven fabrics:				
Square yards.....	427,769,000	306,255,000	237,842,000	80
Value.....	\$47,666,000	\$28,486,000	\$21,066,000	126
Ginghams:				
Square yards.....	536,443,000	302,316,000	278,393,000	93
Value.....	\$37,801,000	\$22,472,000	\$16,179,000	134
Duck:				
Square yards.....	163,487,000	122,601,000	129,234,000	26
Value.....	\$27,846,000	\$17,096,000	\$14,263,000	95
Drills:				
Square yards.....	215,580,000	194,735,000	237,207,000	9
Value.....	\$16,265,000	\$11,596,000	\$11,863,000	37
Ticks, denims and stripes:				
Square yards.....	264,175,000	256,375,000	171,801,000	54
Value.....	\$27,288,000	\$23,788,000	\$16,447,000	66
Cottonades:				
Square yards.....	25,676,000	25,362,000	26,324,000	2
Value.....	\$3,344,000	\$2,999,000	\$2,791,000	20
Napped fabrics:				
Square yards.....	305,656,000	330,808,000	268,853,000	14
Value.....	\$25,695,000	\$26,108,000	\$18,231,000	41
Corduroy, cotton-velvet and plush:				
Square yards.....	19,706,000	16,015,000	7,962,000	148
Value.....	\$6,966,000	\$4,791,000	\$2,682,000	160
Mosquito and other netting:				
Square yards.....	59,161,000	36,233,000	41,885,000	41
Value.....	\$2,104,000	\$765,000	\$876,000	140
Upholstery goods:				
Tapestries (piece goods and curtains)—				
Square yards.....	11,753,000	9,605,000	10,132,000	16
Value.....	\$5,015,000	\$4,243,000	\$4,124,000	22
Lace and lace curtains—				
Square yards.....	85,350,000	53,511,000	37,825,000	126
Value.....	\$9,725,000	\$7,208,000	\$3,585,000	171
Other, including covers—				
Square yards.....	3,222,000	2,476,000	3,223,000	3
Value.....	\$1,256,000	\$661,000	\$662,000	21
Bags and bagging:				
Square yards.....	52,694,000	57,068,000	32,740,000	61
Value.....	\$4,332,000	\$3,954,000	\$2,554,000	70
Cotton towels and toweling:				
Square yards.....	52,808,000	40,280,000	(?)	..
Value.....	\$6,065,000	\$4,365,000	(?)	..
Cotton yarn manufactured for sale:				
Pounds.....	470,221,000	364,473,000	332,186,000	42
Value.....	\$109,219,000	\$79,885,000	\$53,189,000	98
Thread:				
Pounds.....	23,701,000	17,164,000	15,741,000	51
Value.....	\$20,516,000	\$15,043,000	\$11,825,000	73
Twine:				
Pounds.....	13,600,000	6,677,000	11,132,000	24
Value.....	\$2,397,000	\$1,283,000	\$1,475,000	62
Batting and wadding:				
Pounds.....	10,626,000	10,166,000	10,568,000	1
Value.....	\$1,472,000	\$1,173,000	\$864,000	70
Cotton waste, sold as such:				
Pounds.....	309,298,000	247,335,000	270,101,000	15
Value.....	\$10,834,000	\$10,049,000	\$5,552,000	95
All other products, value.....	\$14,557,000	\$10,270,000	\$14,683,000	*1

*Decrease.

†Included in "All other products."

COTTON BILLS OF LADING.

Results of Announced Conference in New York.

A statement of the results of a conference in New York city of representatives of Southern banking and cotton interests and a subcommittee of the American Bankers' Association on the proposed central office plan for safeguarding cotton bills of lading was issued last Tuesday, as follows:

"The subcommittee of the bill of lading committee of the American Bankers' Association having in charge the negotiations with the Liverpool Cotton Conference (1907) Committee regarding a system to be established for the safeguarding of the issuance of bills of lading against cotton, invited representatives from the various

centers particularly interested in financing cotton to attend a conference in New York city June 19.

"The meeting was called for the purpose of discussing with those most interested all of the details of the proposed plan in order to make certain that the system, when placed in operation, would not only meet with general approval, but that every point of unnecessary friction would be done away with. The gentlemen present, representing as they did every part of the country engaged in financing cotton for foreign shipments, were able to discuss the matter from every point of view.

"In order to give those present who were not on the subcommittee an opportunity to consider carefully the proposed details, which were presented to them for the first

time, the meeting was adjourned until 10 o'clock June 20. At this meeting the consensus of opinion of those invited to the conference was expressed in the following resolution:

"The conference thoroughly discussed the plan submitted for verification through a central office, described in paragraph 6, page 1, proposed to be established by the Liverpool cotton conference committee of 1907, and concluded that the method carried with it certain vague responsibilities which are likely to lead to litigation and contention in the future, and that these elements of doubt must be cleared up by the Liverpool committee to the entire satisfaction of the American committee before it can be considered."

"The committee, however, agreed that greater safeguards should be required of transportation companies in the issuance of negotiable bills of lading for merchandise of all kinds, and it approves the methods of safeguarding the issuance of bills of lading proposed in the agreement being signed by the railroads, and will assist and co-operate with all the various interests in the passage and enforcement of Federal and State laws and railway commission regulations leading to greater safety in the handling of negotiable documents for all parties concerned."

COAL CONTRACT ADVANTAGEOUS.

North Carolina Cotton Manufacturers' Meeting.

[Special Cor. Manufacturers Record.]

Charlotte, N. C., June 5.

At a meeting of the Cotton Manufacturers' Association of North Carolina held here today at the Southern Manufacturers' Club, President R. M. Miller, Jr., reported that the mills at large in the State had been benefited by the price for coal that had been secured by the association, the members making a clean saving of \$30,000 and the mills of the State something like \$75,000. This year's contract was made with the Clinchfield Coal Corporation, which gives the association a choice of either Clinchfield, Pocahontas or New River coal.

Mr. Stuart W. Cramer discussed the tariff, and a committee was appointed to investigate the question of marine insurance. As officers were elected Messrs. S. B. Tanner, Charlotte, N. C., president; C. E. Hutchison, Mt. Holly, N. C., first vice-president; J. W. Cannon, Concord, N. C., second vice-president, and T. L. Black, Charlotte, N. C., secretary-treasurer.

Among those present were W. A. Erwin, Durham, N. C.; E. A. Smith, Charlotte, N. C.; Geo. B. Hiss of the Rhodhiss Manufacturing Co., Rhodhiss, N. C.; J. K. Dixon, Gastonia, N. C.; H. M. Wilson, Taylorsville, N. C.; W. White, Graham, N. C.; James Webb, Hillsboro, N. C.; E. A. Barnhardt, Concord, N. C.; J. L. Patterson, Rosemary, N. C.; D. Y. Cooper, Henderson, N. C.; J. F. Schenck, Shelby, N. C.; C. B. Armstrong, Gastonia, N. C.; J. A. McRae, Laurinburg, N. C.; W. A. Maun, Kings Mountain, N. C.; R. M. Miller, Jr., Charlotte, N. C.; J. W. Cannon, Concord, N. C.; C. E. Hutchison, Mt. Holly, N. C.; T. L. Black, Charlotte, N. C.

J. LOUIS SPENCER.

Will Rebuild Avalon Mills.

The Avalon Mills of Mayodan, N. C., wires the MANUFACTURERS RECORD that the company will at once rebuild its plant burned last week. About \$350,000 will be the cost, and the equipment will include 18,000 mule spindles, with accompanying machinery.

The Cotton Movement.

In his report for June 16 Col. Henry G. Hester, secretary of the New Orleans Cot-

ton Exchange, shows that the amount of cotton brought into sight during 289 days of the present season was 11,413,467 bales, an increase over the same period last year of 1,357,346 bales. The net exports were 7,278,268 bales, an increase of 1,582,629 bales. The takings were, by Northern spinners, 1,953,267 bales, a decrease of 7115 bales; by Southern spinners, 2,037,913 bales, a decrease of 75,985 bales.

For Merging Yarn Mills.

Efforts are being continued to effect the recently-mentioned proposed merger of Southern yarn mills. Those interested held a meeting last week, endeavoring to arrange for a \$35,000,000 corporation to control mills having about 1,000,000 spindles. It is understood that Leonard K. Paulson of Paulson, Linkroum & Co., 87 Leonard street, New York, is the principal organizer of the proposed corporation.

Parker Company to Increase Capital.

The Parker Cotton Mills Co. of Greenville, S. C., has called a meeting of stockholders for July 20 to vote on increasing capital stock from \$10,000,000 to \$15,000,000. This additional issue of stock will be divided into guaranteed, preferred and common stock, as determined by the directors. The company's organization was detailed several months ago when it merged a number of cotton-mill companies.

Addition to Greers Mill.

The Greers Manufacturing Co. of Greer, S. C., will build an addition, and has received the bids. This company was mentioned in April as to increase capital stock from \$200,000 to \$350,000. It is now operating 10,240 ring spindles, 280 broad looms, etc.

Textile Notes.

The Rappahannock Woolen Mills Co., Laurel Mills, Va., is reported as to rebuild its plant, reported burned at a loss of \$10,000.

It is reported that Northern and Southern cotton manufacturers are planning the erection of a big mill, and I. M. Putnam of Oklahoma City is endeavoring to secure the enterprise for that city.

South Carolina Water-Works.

Mr. W. F. Stieglitz, council superintendent of the Columbia water-works, will call to order on June 28 the first annual convention of the South Carolina Water-Works Association. Mayor W. H. Gibbes of Columbia will welcome the association, and Mayor Kenneth Baker of Greenwood will reply. The program for the two days' meeting includes addresses by Dr. William A. Boyd, health officer of Columbia, on the relation of water supply to the public health and the danger in the use of well water; by Dr. J. W. Babcock, superintendent of the South Carolina State Hospital for the Insane, on Columbia's water supply; by J. M. Diven, secretary of the American Water-Works Association, on the relation of the local organization to the national association, and by Mr. R. S. Mebane, president of the Republic Cotton Mills, Great Falls, S. C., on the ozone treatment of water, and a discussion on the advantages of a tri-State organization by Superintendents Figg of Savannah, Neave of Salisbury, McLure of Anderson, Ferguson of Augusta, Moffett of Charlotte, Barnwell of Yorkville, Barrow of Athens, Jones of Fayetteville and Easterling of Union.

The paper on manganese and silicon in the foundry contributed by Alexander E. Outerbridge, Jr., of Philadelphia to the Pittsburg convention of the American Foundrymen's Association has been reprinted in pamphlet form.

MINING

Fuller's Earth.

"The Production of Fuller's Earth," by Jefferson Middleton of the United States Geological Survey, has just been published as an advance chapter from "Mineral Resources of the United States, 1910." The fuller's-earth resources of the United States, says Mr. Middleton, have attracted considerable attention for several years because of the increasing demand for this material for use as a clarifying agent for mineral and vegetable oils. The original use from which it derives its name, the fulling of cloth, is now of minor importance.

For a great many years fuller's earth was imported from England, the only known source of supply, but in 1893 it was by accident discovered in this country. At Quincy, Fla., an effort was made, without success, to burn brick on the property of the Owl Cigar Co. An Alsatian cigar-maker employed by the company called attention to the close resemblance of this clay to the German fuller's earth. As a result of this suggestion, the clay was tested and found to be fuller's earth, and the industry was developed. This discovery caused considerable excitement, and supposed deposits of fuller's earth were reported from a number of States. The material in most of these deposits, however, was found to be of no value as fuller's earth. Since the discovery Florida has been the leading State in production. During the early history of the industry fuller's earth was produced in only two or three States. In 1897 to 1899 it was reported from Florida, Colorado and New York, with a very small production from Utah; in 1901 Arkansas was added to the list. From 1904 to 1907 Arkansas was the second largest producer. Shortly after its discovery in Florida, fuller's earth was found in Georgia, but Georgia did not appear as a producer until 1907, when it was the third largest producing State; it ranked second in 1909 and 1910. In 1904 Alabama and Massachusetts reported production, in 1907 South Carolina and Texas first appeared, and in 1909 California entered the list.

The principal use of fuller's earth in this country is in bleaching, clarifying or filtering of fats, greases and oils.

To show the growth of the American industry it is only necessary to state that from 6900 tons in 1895 the production increased to 33,486 tons in 1909. This was the maximum, the output for 1910 being 664 tons less. Florida was the leading producing State in 1910, furnishing 57.38 per cent. of the total output, or 18,832 short tons. The other producing States, named in the order of their rank in output and value in 1910, were Georgia, Arkansas, Texas, California, Massachusetts, South Carolina and Colorado.

Marvel Coal Mining Plant.

At a cost of about \$500,000 the Marvel Coal Co. of Birmingham has completed the mining plant and village it has been constructing at Marvel, Ala. From washer to trestles reinforced concrete and steel construction has been followed to ensure protection from fire. Two openings have been made, and the mining machinery has a daily capacity of 1500 tons of coal, with facilities for increasing to 2000 tons. A centrifugal fan supplies 100,000 cubic feet for the miners at work, there being 225 men employed at present. The entire plant is operated by electricity, and a 500,000-gallon reservoir holds the water supply. The machinery includes automatic scales, shaker screens, tipple, washer, elevators, three boilers of 300 horse-power

each, 1200-horse-power hoisting engine, etc. The village has 240 houses for employees and officials, electric-lighting system, water supply, roadways, fire protection devices, etc. B. F. Roden, Jr., of Birmingham is the company's manager and engineer.

For Mining Mica.

About 350 acres of land containing mica deposits at Axton, Va., will be developed by the George K. Cooper Mica Mining & Manufacturing Co. This corporation has been chartered with \$50,000 capital stock, and George K. Cooper is vice-president. P. J. Boelte of Danville, Va., is president, and wants prices on equipment for the mica mining plant.

FOREIGN NEEDS

Machinery and equipment wanted abroad are mentioned in many letters received by the MANUFACTURERS RECORD, which is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. For the benefit of our subscribers seeking foreign trade we publish the following extracts from recent letters:

Machinery, Hardware, Cotton Goods.

S. Weiss, P. O. Box 217, Belgrade, Servia, writes the MANUFACTURERS RECORD: "American articles are bought here and are preferred to Austrian goods. The import increases each year, and still more could be done if American manufacturers would take more trouble to study the wants of the Balkan Peninsula. I propose that a number of manufacturers rent an office with two show-rooms, where original samples should be filed, with prices either c. l. f. Belgrade or f. o. b. New York steamer. This office should be in charge of one who has good connections with local wholesale dealers, and I am certain that within a few months business would begin and constantly increase, because not only the Servian merchants would be direct buyers of the manufacturers, or American agency in this case, but the big merchants of Bulgaria and Macedonia who often visit this city would become patronizers of the agency. I would be willing to manage this agency if the manufacturers would undertake to take part of the expense, which would hardly amount to more than \$60 per month. There is big want here in different articles, especially machinery, motors, kitchen hardware, cotton goods, yarns, mineral and edible oils, office furniture, woodworking machinery, sulphate of copper, mining machinery, stationery articles and street-paving machinery, especially for asphalted roads, for which the city of Belgrade alone set apart 7,500,000 francs for this and next year."

For Marketing Cotton Goods.

Claus Ebert, Kleine Reichenstr. 20, Hamburg, Germany, writes to the MANUFACTURERS RECORD:

"There is a large trade done in America in cotton goods with Hamburg export houses, who re-export American dry goods to foreign countries, where they have branches, for instance, to Africa, China, etc. Such business is by Hamburg firms who used to purchase American dry goods through their own branches in New York or commission merchants. But the business with American cotton goods could be much extended if the American manufacturers could be brought into connection with those important Hamburg export firms who would buy American dry goods. My idea is to make this trade possible by bringing American manufacturers in touch with the leading Hamburg exporters and to act as selling agent on a commission

basis. I should be much obliged if you would name me some manufacturers who would probably do such business. Specially I want to get in touch with a manufacturer of fancy striped cotton blankets. This line is a specialty of my firm, and I have interest in any kind of blankets."

From Calcutta, India.

P. C. Seth & Co., 62-65 Beadon street, Calcutta, India, write the MANUFACTURERS RECORD:

"Kindly favor with addresses of two or three reliable carriage builders and exporters who have on hand different styles of carriages and their accessories for prompt shipment, as one of our esteemed friends, a leading firm in Calcutta, is anxious to extent their stock to American carriages. American sumach, or 'divi-divi,' botanically known as 'Caesalpinia Coriaria,' is used in dyeing and tanning. Could you give us information leading to the supply of clean seeds for growing plants here of this American tree, as we are constantly receiving orders for large quantities of clean seeds of it, not pods. If any dealer is willing to supply seeds on contract for delivery after first new crop upon favorable terms we shall be glad to hear from you. We offer fine and rare table rice of superb fragrance and delicious quality. Served on the table, it is a surprise to guests. We know of no other sort in cultivation of such delicious and appetizing fragrance as this."

Cottonseed Products, Grains, Feed.

Otto Schild, Kaiser Wilhelm street 24, Hamburg, Germany, writes to the MANUFACTURERS RECORD:

"I am interested in all kinds of feeding stuffs, acting as a sales agent. There are large quantities of cottonseed cake and meal, rice meal, rice husk meal, brewers' and distillers' grains, hominy feed, etc., being shipped from the U. S. A. to our country. Since nearly 10 years I am in connection with the principal buyers of these goods, and I trust, therefore, to do a large business if supported with suitable offers. Perhaps you have sometimes inquiries for opportunities to export the above-named articles from manufacturers of the goods, and I shall feel very grateful to you if you would be so kind as to mention my name in such cases."

For Boat and Cocaine Makers.

Victor Rabe, Catharinenstr. 4-5, Hamburg, Germany, writes to the MANUFACTURERS RECORD:

"I am interested to represent an American boat and oar manufacturer, and I believe a fair amount of business may be done. Please connect me with these people. I have taken charge of the sale of coca leaves from Peru (Cuzco), representing a first-class German firm established there about 10 years. My friends have shipped big lots of this product to the Malinckrodt Chemical Works of St. Louis, which concern later has been engaged by another exporter. Please be kind to give me addresses of manufacturers which want to buy these leaves used to make cocaine, a very important chemical product."

Roumania Needs American Products.

M. Kohan, Galatz, Roumania, writes to the MANUFACTURERS RECORD:

"There are some articles for which there would be a good opening in our country, but as a rule it is very difficult to deal with American manufacturers owing to the very strict terms of payment they want. European manufacturers, especially in the line of machines and technical lines, allow long credit terms. Some of them, in order to introduce their manufactures, open depots of their own or send goods on consignment, and thus become known. There are also

articles which are bought for cash on price-lists, but most articles require to be sold on certain special terms, and these terms we shall want to be allowed."

Textile Products Wanted.

Shewsahaymul Shew DaYal, Amritsar, India, writes to the MANUFACTURERS RECORD:

"We ask you to advertise in your esteemed paper our firm's name as importers of cotton piece goods, woolens, sundries, mercerized silk, cotton and wool yarns, sundries of all kinds. The firm is an old firm of standing, and has connections already in England, Germany, Switzerland, Japan, with respectable manufacturers and shippers. We shall esteem it a privilege to support the business our American friends entrust us with. The position of the firm can be ascertained from the Chartered Bank of India, Australia, China and New York."

Advertising Novelties Wanted.

Mostra Politecnica, via Meravigli 16, Milan, Italy, writes to the MANUFACTURERS RECORD:

"We have had the occasion to write some of your advertisers, and have duly mentioned that we took their addresses from the MANUFACTURERS RECORD. We wish to say that we would be pleased if you would kindly point out to us anything in the way of small novelties for which you might anticipate a very large sale; also anything in the way of advertising novelties for free distribution. We would always consider advices on anything that you might consider would be suitable for our market."

Carbon Black Manufacturers.

Aktieselskabet Sadolin's Farver, Vesterbrogade 70, Copenhagen, Denmark, writes the MANUFACTURERS RECORD:

"We would be glad if you would quote us the names of the leading manufacturers of carbon black, prepared by burning natural gas, and not lampblack. We are manufacturers of fine printing and lithographic inks, and are investigating absolutely first-class carbon black."

Wants American Manufactures.

Alois Schweiger & Co., Bergasse 7, Vienna, Austria, write to the MANUFACTURERS RECORD:

"If you can insert in your paper that quotations and free samples of American goods suitable for the far East shall be sent to us here in Vienna we shall be very pleased, and we believe that we shall be also able to handle orders, provided the right thing is sent to us and favorable prices are quoted."

Papier Mache Coverings.

Mr. D. Lichatschew, No. 4 Wojennoi Spusk, Odessa, Russia, writes the MANUFACTURERS RECORD:

"Please give me the addresses of some firms making 'papier mache' for covering walls and ceilings. If I understand correctly article in your journal of October, 1910, page 30, such wall coverings are made of metal, but they are not used here."

Southwest Louisiana Irrigation.

By the completion last week of 26½ miles of canal extension in Vermilion parish, Louisiana, by the United Irrigation & Rice Milling Co. the Vermilion and Abbeville canals were united and 11,300 acres were added to the rice acreage served by these canals. This system embraces 185½ miles of main canals and laterals with a capacity for irrigating 52,000 acres of land and a pumping capacity of 300,000 gallons of water a minute.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Mengel Box Co. Plans.

The Mengel Box Co. of Louisville has plans for the box factory recently announced as to be erected at Winston-Salem. Its building will be of reinforced concrete, with steel sash carried on low brick walls, three stories high, having 93,000 square feet of floor space. This structure will be equipped with steam-heating apparatus, automatic sprinkler system, electric lighting equipment, ventilation system, box machinery driven by electric motors, etc. The plant's daily capacity will probably be 20,000 boxes.

Mill Plant Costing \$25,000.

The Ozone Lumber Co. of Rio, La., has purchased 5000 acres of timber and will erect a circular-saw mill with a daily capacity of about 50,000 feet of lumber. This plant will be located at Talisheek, and the machinery has been purchased. It is estimated that the mill and improvements will cost \$25,000. The company's president is J. R. Pratt of Gulfport, Miss., and its general manager is F. W. Fatherree of Rio.

Contract for 300,000 Ties.

A big contract for ties has been awarded to the Beaumont (Texas) Lumber Co. It calls for 300,000 ties to be delivered at Oklahoma City, 30,000 to be delivered for the first month, beginning August 15, and from 30,000 to 50,000 each month thereafter until the 300,000 ties have been furnished. These ties are for the Winnipeg, Salina & Gulf Railway Co. of Salina, Kans.

Company Capitalized at \$1,100,000.

The Arkansas Short Leaf Lumber Co. of Kansas City has been incorporated with \$1,100,000 capital stock by R. A. Long of the Long-Bell Lumber Co. and associates.

This new company, C. B. Sweet, vice-president, Kansas City, wires the MANUFACTURERS RECORD that it has purchased the Sawyer-Austin Lumber Co. at Pine Bluff, Ark., including 76,000 acres of timber land and a plant with an annual output of 40,000,000 feet of lumber.

Bee Tree Lumber Co.

Pennsylvania and West Virginia capitalists have incorporated the Bee Tree Lumber Co. of Blue Jay, W. Va., with \$100,000 capital stock. They are J. W. Romine of Parkersburg, W. Va.; A. J. Hamilton of Blue Jay, W. Va.; P. P. Griffin of Lock Haven, Pa., and J. H. Hatcher of Beckley, W. Va.

To Merge Furniture Factories.

It is understood that plans are being formulated to merge a number of furniture manufacturing companies in North Carolina, among them being the Tate Furniture Co. of High Point. This company wires the MANUFACTURERS RECORD that nothing definite has as yet been effected.

New Mill to Cost \$75,000.

The Lee Lumber Co. of Tioga, La., writes to the MANUFACTURERS RECORD that its plant will be rebuilt as a 40x200-foot wooden structure, this and the machinery to cost from \$65,000 to \$75,000. The Lee plant was destroyed by fire last week.

Georgia Pulp Wood Co.

The Georgia Pulp Wood Co. of Atlanta has been chartered with \$1,000,000 capital stock by Frederick Kauffman and J. L. Anderson of Atlanta and T. R. Lombard of New York.

MECHANICAL

A Mechanical Cotton Picker.

A cotton picker has been developed in Baltimore and patented within the past year that is claimed by its inventor, C. N. Goodwin, to accurately fulfill all the conditions required of a practical mechanical cotton picker. Mr. Goodwin is a native of North Carolina, and was raised on a plantation near Raleigh and obtained his ideas of a mechanical picker from actual observation while engaged in the cotton field. In recent years he has been engaged in mechanical work, and has constantly kept in view the possibilities and means of perfecting the cotton picker. He is an experienced engineer and machinist. He has constructed the Goodwin cotton picker and given it practical tests in the cotton fields.

The outfit consists of a horse-drawn cart on which a kerosene three-horse-power engine, a blower and conveyor apparatus and a receptacle for the cotton are installed. Eight suction pipes extend from this conveyor, four on each side of the cart, and each of these flexible tubes has attached at the outer end the mechanical picker. The picker is held by the man engaged in picking the cotton, and as many as eight men can operate with each machine.

The inventor claims a capacity for the machine of 1000 pounds of cotton per day for each man engaged; that it will pick 100 per cent. of the matured cotton and will not disturb the bolls not ready for picking; that it will pick from the ground as well as from the bush; that it will not pick up leaves or trash, but yields a cleaner grade than is produced in hand picking; that it can be operated by from one to eight ordinary farm hands, and that the cost of the machine will place it within the reach of every thrifty cotton farmer. The weight is about 750 pounds, and the outfit can be easily cared for.

The cart can be used as a general utility cart simply by removing the engine, and the kerosene engine can be used for any of the diverse uses to which engines are put on the farm. The inventor will leave in a few days with the completed machine to give it further field trials for speed in picking cotton and for endurance, at points in North Carolina and Texas. The results of these endurance trials will determine whether the long search for a satisfactory picker that can be bought and operated by the average cotton-grower has resulted in success.

Address of the inventor is C. N. Goodwin, Citizens' National Bank Building, Raleigh, N. C.

Automatic Hydraulic Rams for Water Supplies.

The advantage of using water at a convenient head for power purposes is effectively applied by the Rife Machine Co. 2133 Trinity Building, New York, in the Rife automatic hydraulic ram, in which the accumulated power of water at a small head is utilized to raise supplies of water to a height of as much as 30 feet for each foot of fall used. By means of this hydraulic ram water may be supplied for town water-works, railroad tanks, irrigation purposes, country residences, etc. When overhead tanks and towers are objectionable, Rife Rams will deliver into pneumatic tanks and automatically supply sufficient air to maintain an air cushion in both the hydraulic ram and in the pneumatic tank.

The accompanying illustration shows the Rife ram of 300 gallons capacity per minute, weight 2300 pounds. With a ratio of fall to pumping head of 1 to 8,

this ram develops an efficiency of 93 per cent.

It is stated by the company that over 40 railroad companies use these machines to supply their tanks, and that for all purposes used there are over 8000 Rife rams in successful operation. The rams require no fuel or attendants, and about the only operating expense is for lubricant. The only wearing parts are the valves. As an example of the use of these rams, the Colombian Government has had in use for six years a battery of three large rams with a capacity of 700 gallons per minute each, pumping water a distance of 13,000 feet to an elevation of 262 feet at Colombia, South America.

A small town that has installed these rams obtains a supply of 600,000 gallons of water daily at an operating expense of less than 50 cents per day.

The company also makes these rams to be operated by muddy or impure water, producing the power to deliver potable water in which the necessary volume or fall is not sufficient to operate a single-acting ram.

Rife rams used for irrigation purposes in pumping water into an upper ditch or reservoir brings into cultivation land that would otherwise be of little value, and at practically no cost of operation. A shipment of 100 of these rams was recently made to one firm in South America.

President Greider of the Rife Engine Co. states that two of these rams are supplying water to the Charlottesville Woolen Mills, Charlottesville, Va., at the rate of 100,000 gallons per day at an operating

Here is a practical illustration of the South beginning to make up its raw materials into finished products. This is the second plant of this kind in the South. It is a fine illustration of the enterprise and ability and perseverance of two Georgia men—E. F. Hartfelder and John H. Strous, of the well-known machinery house of Hartfelder & Garbutt Company of Savannah.

The company, while established about two years ago, has just completed on the line of the Central of Georgia road a new molding and finishing plant occupying about two acres of the eight it has available for future needs. The plant in its physical and mechanical features is modern and complete in every detail. The raw material starts in its molten shape at one end of the plant, and from this point, from one stage of manufacturing detail to another, the castings are handled in orderly fashion until the finished product finds its allotted place in the showroom, and from here to the shipping department. No waste handling, no loss in efficiency is possible. Every action and movement of the men

skillful and productive workers. The company is well pleased with the results that they are giving.

The company has a capital of \$150,000, and is under the direct management of Messrs. Hartfelder and Strous.

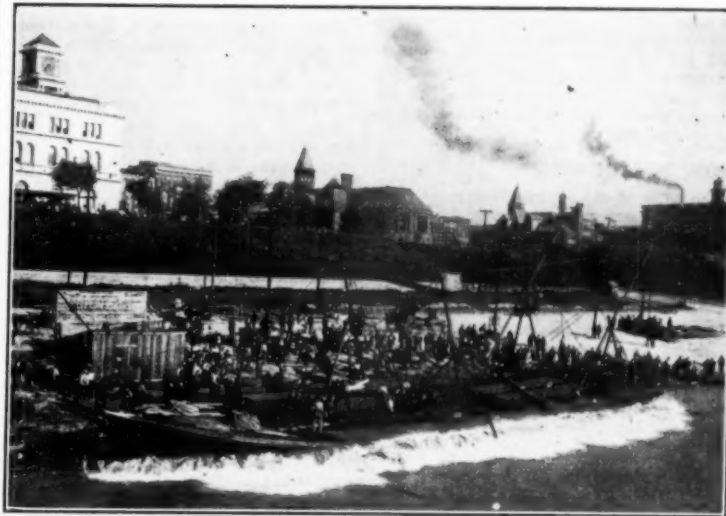
The location of the plant, which gives them favorable shipping facilities and water rates, enables the company to reach all of the Eastern seaboard markets, as well as foreign markets.

The pig-iron used is that of the Alabama Consolidated Coal & Iron Co. of Birmingham. With reference to the supply of material, an interesting feature was the

ment, and made possible by the building of double-length furnaces.

A Memphis-Built Steel Steamboat.

The recent launching of the steel hull shown in the accompanying illustration from a photograph taken just as the vessel settled in the water from the ways marks a step in the industrial progress of Memphis, Tenn., where the vessel is being built. The work is being done entirely by local builders, and under the direction and plans of Capt. R. E. Lee of the Lee Line of steamers, and is named the Bob Lee, Jr. The steel hull was constructed by the



LAUNCHING THE "BOB LEE, JR." AT MEMPHIS.

accidental finding of a supply of splendid molding sand right at the cupola, and the company, instead of being compelled to purchase its sand for molding from distant points, has it at its very doors. No foundry could be better situated as to its supply of sand than this one. The plant in all its details is a well-rounded, complete establishment.

National Tube Co. Exhibit.

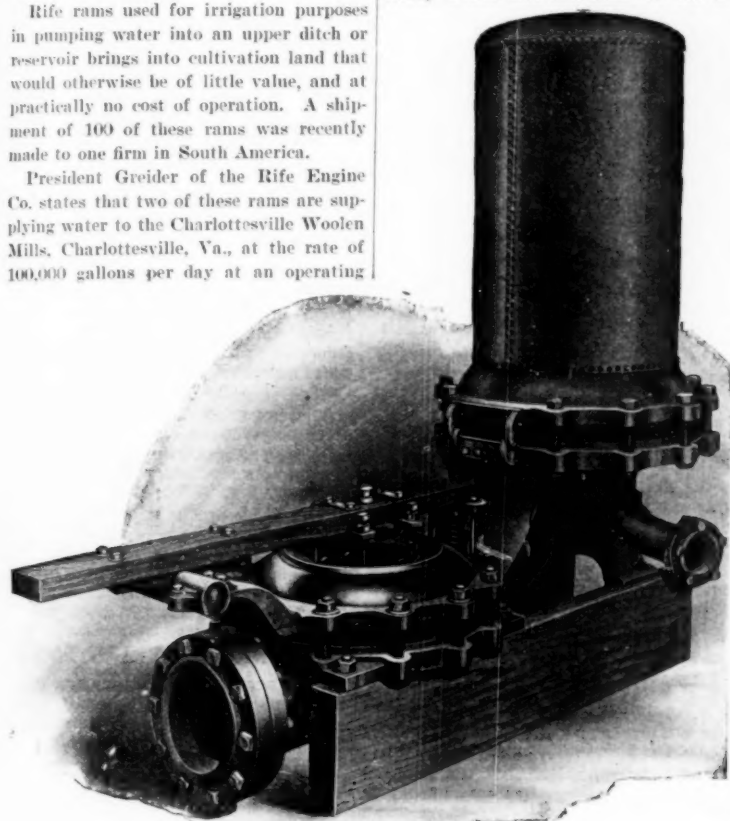
The National Tube Co. of Pittsburg maintained an exhibit at the sixth annual meeting of the National Gas Association of America, held in Convention Hall at Pittsburg last month. This exhibit is illustrated herewith. It consisted of tubular goods of various kinds and sizes,

Southern Boiler and Tank Works, and is the first of its kind ever built in Memphis. It is 154 feet long, 36 feet beam and 5 feet 6 inches depth of hold. The hull is divided into 16 water-tight compartments, and has a displacement of approximately 600 tons at load water line.

The 300-horse-power engines are being built by the Allen Engineering Co., and were designed by that firm for a steam pressure of 200 pounds. An interesting feature of the engines, which are cross-compound, is the controlling valve, which admits steam to both high and low-pressure cylinders for starting and then automatically shuts off the low-pressure cylinder from the high-pressure steam as soon as the boat has good headway.



NATIONAL TUBE COMPANY EXHIBIT.



RIFE AUTOMATIC HYDRAULIC RAM.

expense of only 50 cents per month. This shows that the ram costs practically nothing to operate after it has once been installed, and under favorable conditions it offers a remarkably inexpensive method of supplying water for manufacturing plants, small towns and villages, railroad water stations and for farms and residences.

The Rife Engine Co. guarantees an efficiency of 60 to 90 per cent., and will furnish drawings, estimates, etc., free upon receipt of the data of water supply, fall, elevation of tank and other requirements when sent to the office of the company.

Southern Fittings & Foundry Co.

Twenty-six thousand five hundred dollars is the amount of a single order of pipe fittings, covering ells, flanges and flange fittings, recently received by the Southern Fittings & Foundry Co. of Savannah, Ga., from the well-known firm of H. Belfield & Co. of Philadelphia. This is said to be the largest order ever placed in the South for fittings, and compares favorably in amount with single orders of similar products filled by older foundries in other sections.

and the machinery tells for the most economical and productive results. The shop is well ventilated, well lighted, equipped with conveniences for the men, including shower baths and other features. The capacity of the plant at present is 20 tons daily of cast-iron screwed fittings, ells, flanges and flange fittings in sizes from one-half inch to six inches. The management is now preparing to make fittings up to the maximum size of 12 inches. In the center of the plant is located a concrete fireproof building, separated from all of the other buildings, in which is stored the valuable and expensive patterns of the company, so that in the event of a fire this building will absolutely protect the patterns, records and the expensive woods. About 100 men are employed, all negroes with the exception of the foremen and the superintendents, who are white men and experts in their respective lines. The negroes are proving to be tractable and good workers, not only as to quantity of work produced, but as to the quality and finished appearance of the product. They are carefully selected for aptitude, energy and reliability, and soon develop into good

including rifled pipe, extra-heavy pipe, double extra-heavy pipe, casing, oil-well tubing, boiler tubes, cast and malleable-iron fittings, regrinding valves and cocks, oil country goods and "Kewanee" specialties.

Several special features of the show were as follows: Shelby table top made from hundreds of pieces of Shelby seamless steel tubing; one piece 6-inch pipe 41 feet long. This was quite an attractive article, as the making of pipe in such lengths is a comparatively recent achieve-

This steamer will ply between Memphis and St. Louis under a fast schedule. The civic spirit of Memphis is exemplified in the confidence with which this work was inaugurated and the zeal with which the Allen Engineering Co. and the Southern Boiler and Tank Works carried out their part of the undertaking. Citizens of Memphis are congratulating Captain Lee, to whom credit is due for the idea and opportunity of having a boat of this class built entirely by Memphis designers, builders and workmen.

Construction Department

TO OUR READERS!

In order to follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "it is reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be shown on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

"In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned."

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year. On all advertising contracts in the Manufacturers Record for three months or longer a subscription for the contract period to the Daily Bulletin is included.

BRIDGES, CULVERTS, VIADUCTS

Fla., Tampa.—Board of Public Works has \$150,000 available for construction of bridge across Hillsboro River at Lafayette St.; reinforced concrete; bascule type; 80 feet wide, carrying two street-car tracks; main roadway 60 feet wide; two 10-foot sidewalks for pedestrians; clear space between bridge and water 15 feet; Frederick T. Warren, City Engineer; D. B. McKay, Mayor; recently noted to receive bids, plans and specifications within 45 days.

Ga., Moultrie.—Colquitt county is considering \$30,000 bond issue for construction of steel bridges, etc. Address County Commissioners. (See "Road and Street Work.")

La., Church Point.—Church Point Corporation, Paul R. Breaux, clerk, will expend \$1000 on wooden bridge (across Bayou Plaquemine) and grade; begin work in July; engineer not engaged. (Recently noted.)

Md., Towson.—Baltimore County Highways Commission awarded contract to York Bridge Co., York, Pa., at \$1995 to construct draw-bridge on Eastern Ave. over Back River; Henry G. Shirley, County Roads Engineer. (Call for bids lately noted.)

Miss., Mayersville.—Issaquena county will repair and place new draws in all bridges now over Steel's Bayou; bids received until July 3; M. M. Spiers, County Clerk. (See "Machinery Wanted.")

N. C., Washington.—Mattamuskeet Railroad Co., J. F. Tayloe, president, will con-

struct two draw spans 500 feet and 1000 feet, respectively. (See "Machinery Wanted.")

S. C., Greer.—Greenville county will construct wooden bridge over Enoree River near Greer; contract to be awarded June 27; J. P. Goodwin, County Supervisor, Greenville, S. C. (See "Machinery Wanted.")

S. C., Newberry.—Newberry county will construct steel or iron bridge over Enoree River at Brazzleman's Ferry; contract to be awarded July 1; L. I. Feagle, chairman County Commissioners. (See "Machinery Wanted.")

Tenn., Chattanooga.—W. L. Dodds, County Engineer, awarded contract at \$2964 to Converse Bridge Co., Chattanooga, to construct bridge across Sale Creek; 18x50 feet; steel; concrete pillars. (Lately noted.)

Tex., El Paso.—Galveston, Harrisburg & San Antonio Railway will construct viaduct across tracks on Smelter Rd.; supervision of G. S. Waid, superintendent; reinforced concrete structure; estimated cost of road and viaduct improvements, \$76,000. (Previously noted to be built by this company in conjunction with El Paso & Southwestern, Gulf, Colorado & Santa Fe Railway and El Paso Street Railway Co.)

Tex., Waco.—Southern Traction Co. will construct bridge across Brazos River.

Tex., Richmond.—Fort Bend county receives bids until July 10 for construction of two steel bridges over Brazos River, one near Thompson and other near Orchard, Tex.; cost \$30,000 each; John W. Maxey, consulting engineer, 1716 Dallas Ave., Houston, Tex.; George C. Baker, Jr., County Judge. Recently mentioned. (See "Machinery Wanted.")

Va., Petersburg.—Matoaca Bridge Co., John A. Seay, president, awarded contract to Virginia Bridge Co., Roanoke, Va., at \$6200 to construct wagon bridge across Appomattox River, connecting Matoaca, in Chesterfield county, with Fernside, in Dinwiddie county; structure will be of steel; two spans; 250 feet long and 16 feet wide; 12 tons capacity. (Recently mentioned.)

Va., Rocky Mount.—Franklin county will construct bridge over Staunton River at Hardy's Ford, between Franklin and Bedford counties; bids received until July 3; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

CANNING AND PACKING PLANTS

Ala., Summerdale.—Summerdale Canning Co. incorporated with \$10,000 capital stock; W. S. Harvey, president and treasurer; August Helwig, secretary and general manager; Frank S. Stone, vice-president; occupy erected building; daily capacity about 10,000 cans.

La., Lafayette.—Consumers' Cold Storage & Canning Co., Fernand Mouton, president, will establish canning factory of 20,000 to 30,000 cans daily capacity; lately noted. (See "Ice and Cold Storage Plants.")

La., Ebenezer.—P. L. Guldbeau, director of Arcadia Parish School of Agriculture, will establish cannery.

Tex., Houston.—National Packing Co., Chicago, Ill., leased building to be erected by S. J. Westheimer; structure to be three stories, of reinforced concrete construction; plans prepared by National Packing Co.; equipment will include smoking and refrigerating plants, electrically operated; contracts for machinery are being awarded; cost, exclusive of building, about \$40,000; A. L. Brooks, local manager.

Tex., Marathon.—Isaac Roark will establish Glass Mountain Canning Works; O. W. Bennett is also interested; machinery ordered.

Tex., Wharton.—G. F. Aldrich, South Houston, Tex., is interested in establishment of cannery.

Tex., Wharton.—G. F. Aldrich will erect cannery.

CLAYWORKING PLANTS

Md., Mount Savage.—Bricks.—Union Mining Co., H. Crawford Black, president, Baltimore (Md.) office, Fidelity Bldg., has adopted plans for extensive addition; when completed plant will have daily capacity of 100,000 nine-inch bricks; construction begun; manufactures brick and special shapes for iron, steel and allied trades, cement industries, etc.

Mo., Rolla.—Rolla Fire-Clay Co. incorpo-

rated with \$14,000 capital stock by David E. Cowan, W. T. Dennison and J. A. Watson.

COAL MINES AND COKE OVENS

Ky., Whitesburg.—Swift Coal & Timber Co. purchased through Henry F. Day of Whitesburg coal and mineral rights on Pert Creek land.

W. Va., Rivesville.—Davis Elkins of Elkins, W. Va., and associates are, it is reported, planning development of 11,000 acres coal land near Rivesville.

CONCRETE AND CEMENT PLANTS

Ala., Gadsden.—Gadsden Concrete Co. organized with \$10,000 capital stock to establish plant for manufacturing concrete sewer tile, building blocks, sills, etc.; main building, 50x100 feet; will install steam curing plant; W. R. Moore, Birmingham, Ala., is president, and E. C. Little of Gadsden vice-president, secretary and treasurer.

Fla., Bayboro (not a postoffice).—Building Blocks, etc.—Crescent Cement Co. will establish plant to manufacture cement building materials, including building and paving blocks, cement roofing tile, porch columns, etc.; will erect two buildings, one 36x70 feet and 14 feet high, and other 30x56 feet with 24-foot ceiling; equipment will include two 75-ton hydraulic presses; also construct dock extending into water 16 feet deep; Robert F. Estes will be general manager and Frank E. Estes (both of St. Petersburg) will be consulting engineer.

Okla., Tulsa.—Sewer and Drainage Tile.—Tulsa Concrete Tile Co., G. N. Wright, president, will enlarge plant for manufacturing concrete sewer and drainage tile.

COTTON COMPRESSES AND GINS

Ala., Girard.—Knight & Edmunds will rebuild burned cotton gin; four 70-saw gins.

Ark., Arkadelphia.—Roy Golden will erect cotton gin.

Ark., Alma.—Dean Bros., Dean Spring (R. F. D. from Alma), will erect cotton gin.

Ga., Lexington.—Lexington Gin & Milling Co. will install cotton gin and generally repair equipment.

Ga., West Point.—J. T. Zachry will open bids at once to erect cotton compress; fire-proof construction; cost \$4000; cost of machinery (purchased), \$3000; daily capacity, 40 bales of cotton. (Recently noted.)

Miss., Ruleville.—Ruleville Compress Co. incorporated with \$25,000 capital stock by M. T. Murphree, A. J. Linx and others.

N. C., Newton.—Newton Oil & Fertilizer Co. will install ginnery, etc. (See "Fertilizer Factories.")

Okla., Tecumseh.—Farmers' Gin & Manufacturing Co. incorporated with \$10,000 capital stock by E. M. Whitall, J. R. Lansdown and Joe Stevenson.

Tex., Luella.—Luella Gin Co. incorporated with \$10,000 capital stock by Seay, P. H. Luby and W. Jackson.

Tex., Midway.—William Harhuck will erect cotton gin; cost \$7000.

Tex., Sweden.—W. F. Thompson, Cuero, Tex., will erect cotton gin.

Tex., Reagan.—A. P. Jones will erect cotton compress; 80 horse-power gasoline engine; capacity 75 to 100 bales cotton per day; construction begun.

COTTONSEED-OIL MILLS

Ark., Arkadelphia.—United Cotton Oil Mill Co. will establish \$50,000 cottonseed-oil mill; construction begun.

N. C., Newton.—Newton Oil & Fertilizer Co. purchased machinery for 25-ton cottonseed mill; also will install fertilizer mixing plant and ginnery. (See "Fertilizer Factories.")

Tex., Lampasas.—Gillert Cotton Oil Co. incorporated with \$40,000 capital stock by E. K. Gillert, J. H. Gillert, A. G. and Roy L. Walker.

DRAINAGE AND IRRIGATION

Ark., Lake Village.—Chicot Drainage District completed organization with I. M. Worthington, president, and J. B. Johnson, secretary; will arrange at once for topographical surveys, issuance of bonds and construction of drainage canals.

Fla., Fort Pierce.—Miami Engineering &

Drainage Co., A. B. Saunders, president, Miami, Fla., has contract at about \$120,000 for excavation work on Taylor's Creek.

La., Abbeville.—Bayou Tigree Drainage District voted \$30,000 bond issue for construction of drainage system. Address District Commissioners.

La., Lake Arthur.—Alluvial Lands Co., E. C. French, president, has closed contract with Fenwick Excavator Co. to drain and develop 10,000 acres of wet prairie land near Lake Arthur; land will be developed in tracts of 1000 acres; will construct protection levees, canals, drainage ditches, etc.; T. H. Mandell, Lake Charles, La., is supervising engineer.

La., New Orleans.—Prairie Reclamation Co. incorporated with \$200,000 capital stock; Charles W. Buckley, president; Joseph D. Weaver, vice-president, and Charles A. Phillips, secretary-treasurer.

Mo., Carthage.—J. M. McFard contemplates irrigating truck farm and orchard; proposed to install centrifugal pump (power to be supplied by 12-horse-power gasoline engine) and force water up hill from Center Creek about 75 feet from creek level; from top of hill water is to be distributed over various parts of farm.

Miss., Corinth.—Tusculum River Drainage Canal Commission (N. A. Powell, Patrick Hanley and W. W. Hinton) awarded contract to N. C. McGlump, Bement, Ill., at \$72,192 to construct canal; 2 1/2 miles long, 26 feet wide and 9 feet deep.

Mo., Carrollton.—Drainage District No. 3 of Carroll county awarded contract to M. J. Hanawalt, Monticello, Ind., for all laterals; 315,920 cubic yards earth excavation; price \$8.73 per cubic yard; engineers, Brooks & Jacoby, 515 Shukert Bldg., Kansas City, Mo. (Contract recently noted awarded to R. R. Gordon, Celina, O., for main canal in this connection; reclamation of 20,000 acres; estimated expenditure \$200,000.)

N. C., Dunn.—Property-owners in vicinity of Stewarts Creek contemplate organization of drainage district to drain about 10,000 acres of land about five miles from Dunn. Address Harnett County Commissioners at Lillington, N. C.

Tex., Uvalde.—Dr. F. S. Pearson, president of Mexico Northwestern Railway, 20 Exchange Pl., New York, is reported as to construct system to irrigate 20,000 acres of Uvalde county land he owns, obtaining water from Nueces River and Turkey Creek.

ELECTRIC LIGHT AND POWER

Ark., Dermott.—City contemplates improving electric-light plant; betterments to include installation of direct-connected generating unit. Address The Mayor.

Ark., Clarksville.—City will construct electric-light plant; cost \$20,000; will purchase wires and poles of E. T. McConnell's plant, which was reported burned in February. John M. Davis, D. Ward Dunlap and A. N. Ragon, Board of Commissioners. O'Neil Engineering Co., Dallas, Tex., will probably install plant.

Ark., Cotter.—City granted 30-year franchise to E. B. Griswold to operate electric-light plant.

Ark., Helena.—Helena Gas & Electric Co.'s power-house and equipment plans and specifications have been completed by Scofield Engineering Co., Arcade Bldg., Philadelphia, Pa., and is now inviting bids. (Lately mentioned.)

Fla., Plant City.—City is considering, it is reported, construction of electric-light plant. Address The Mayor.

Fla., Port St. Lucie (not a postoffice).—It is proposed to construct electric-light plant; J. H. Rogers, Sewalls Point, Fla., can probably give information.

Ga., Washington.—City will vote July 14 on \$30,000 bond issue for reconstructing electric-light plant; will erect building 60x70 feet, mill construction; engineers, Westinghouse, Church, Kerr & Co., 10 Bridge St., New York; E. A. Barnett, Mayor. (Recently mentioned.)

Ky., Midway.—City awarded contract to Moore-Young Electric Co., Lexington, Ky., at \$575 to construct electric-light system; 110-volt direct-connected engine generator; electrical unit to be slow-speed type, running at 300 R. P. M.; Prof. A. M. Wilson of State University, Lexington, Ky., prepared specifications and will supervise installation of plant.

La., Roseland.—City will not install electric-light plant. (Recently incorrectly reported.)

Miss., Bay Springs.—Bay Springs Electric Co. incorporated with \$10,000 capital stock by C. E. Burnham, L. L. Denson, E. A. Denson and others.

Miss., Coffeeville.—P. M. Woodall contemplates erection of electric-light plant; may install ice machinery. (See "Machinery Wanted.")

Mo., St. Louis.—Stone & Webster Engineering Corporation, 147 Milk St., Boston, Mass., plans constructing electrical transmission lines from hydro-electric development at Keokuk, Ia., to St. Louis; transmit at 100,000 volts; delivery at 6600 volts; build transforming station in St. Louis county.

N. C., Raleigh.—State Hospital will install electric-light plant. S. O. Middleton, Hallsville, N. C., and others compose executive committee.

N. C., Selma.—City contemplates installation of electric-light plant; John A. Mitchener, Mayor. (See "Machinery Wanted.")

Tenn., Memphis.—Lunda Light Co. incorporated with \$5000 capital stock by P. F. Lunda, N. W. Lunda, W. L. Fisher and others.

Tex., Alvin.—Alvin Water, Light & Ice Co. incorporated by L. H. Wallis and others. (See "Water-works.")

Tex., Liberty.—Liberty Light & Power Co. will establish electric-light plant and 5-ton ice plant; construction begun; also contemplates building creamery; proposes to incorporate with \$4000 capital stock; R. E. Bowen, president, and C. F. Steusoff, secretary-treasurer.

Tex., Terrell.—City has plans by A. B. Casgrain of Terrell for building to house light and water plants; contract awarded to Sherwood Concrete & Paving Co. at \$5950. (See "Water-Works.")

Va., Rocky Mount.—City is having specifications prepared by W. P. Bullock, Kansas City, Mo., to construct electric-light plant, water-works and sewer system; city lately noted as voting \$50,000 of bonds.

Va., Rocky Mount.—City voted \$50,000 bond issue for construction of electric-light plant, sewer system and water-works. Address The Mayor.

FERTILIZER FACTORIES

Ala., Huntsville.—Farmers' Cotton Oil & Fertilizer Co. will increase capital stock to \$50,000 and add fertilizer and acidulating plant.

Ala., Opp.—E. E. Kelly and associates will establish guano factory.

N. C., Newton.—Newton Oil & Fertilizer Co. will install fertilizer-mixing plant and ginery; purchased machinery for 25-ton cottonseed-oil mill. (Previously noted incorporated with \$50,000 capital stock by J. B. and R. A. Little and others.)

FLOUR, FEED AND MEAL MILLS

Va., Raccoon Ford.—I. S. England will rebuild flour, feed and meal mill; 34x39-foot structure; cost \$3000; contract not awarded. (See "Machinery Wanted.")

Va., Raccoon Ford.—E. E. England will rebuild mill burned at loss of \$12,000.

FOUNDRY AND MACHINE PLANTS

Ark., Fort Smith.—Electric Cars.—Fort Smith Light & Traction Co. is reported as to expend about \$55,000 to enlarge and rebuild car barns for manufacturing street cars.

Ark., Fort Smith.—Cars.—Fort Smith Light & Traction Co. will erect addition to plant and equip for manufacturing street cars; J. Walter Gillette, general manager.

Ark., Stuttgart.—Bells, etc.—Rousch-White Machinery Co. (address, care of Commercial Club) will establish plant to manufacture bells, feed and cane mills.

Fla., Jacksonville.—Shipbuilding.—Merrill-Stevens Company will erect addition to machine shop; 45x50 feet; equipped with \$7000 worth of new tools, boiler and milling machine; construction begun.

Ky., Louisville.—Henry M. Martin Manufacturing Co. incorporated with \$10,000 capital stock by Henry H. Martin, Charles J. Bear and George L. Martin.

La., Shreveport.—Brass.—J. B. Atkins and others will incorporate Gardner Carburetor & Brass Co.; have purchased machinery for plant.

Mo., Carthage.—Machinery.—Standard Machine Manufacturing Co. incorporated with \$30,000 capital stock by Charles B. Guinn, W. H. Phelps, J. P. Leggett and others.

Mo., St. Louis.—Boilers.—Toledo Flanner

Boiler Co., Toledo, O., is considering establishment of branch boiler plant to cost about \$100,000. J. J. Rice is company's St. Louis representative.

Okla., Bartlesville.—Petroleum Machine Co. incorporated with \$50,000 capital stock by George B. Keeler, L. A. Rowland and H. G. Durnell.

Okla., Tulsa.—Oklahoma City Iron Works will erect three additional buildings; one structure, 86x146 feet, to be equipped as foundry; another, 50x100 feet, for blacksmith shop; third, 32x70 feet, for pattern shop; construction begun. (Recently mentioned.)

Okla., Claremore.—Plumbing.—Mayberry Bros. will rebuild plumbing and machine shop lately reported burned; 40x50 feet; fire-proof; electric lighting; cost \$4000; temporary address, 4th St. and Cotalee Ave.

S. C., Sumter.—Acetylene-gas Machine.—J. A. Epperson and A. J. Ard will establish plant to manufacture acetylene independent gas machine.

Tenn., Decherd.—Machine Shop, etc.—Decherd Mill Co.'s building (recently noted) will be 24x50 feet; iron clad; will install equipment. (See "Machinery Wanted.")

Tenn., Nashville.—Machinery, etc.—F. L. Estes & Co. have elected F. L. Estes president, Lucien Hewlett vice-president, George M. Stiegler treasurer; will continue established plant. (Recently noted incorporated with \$9000 capital stock.)

GAS AND OIL DEVELOPMENTS

Ala., Birmingham.—Morgan Oil & Gas Co. incorporated with \$6000 capital stock; J. C. Reders, president; J. G. Johns, vice-president; W. T. Mayfield, secretary-treasurer.

La., New Orleans.—Waguespack Oil & Land Co. incorporated with \$60,000 capital stock; Raymond Waguespack, president; J. U. Fosse, vice-president; F. C. Reaume, secretary.

Okla., Konawa.—Konawa Oil & Gas Co. incorporated with \$35,000 capital stock by W. S. Lowe, George M. Swift and A. J. Lowe, all of McAlester, Okla.

Tex., Fort Worth.—Fort Worth Oil & Development Co. incorporated with \$30,000 capital stock by B. F. Allen, Jr., J. B. Hagler and Clifford G. Beckham.

W. Va., Huntington.—Mexican Land & Oil Co. incorporated with \$150,000 capital stock by J. S. Davis, C. H. Hall and J. F. Cavendish, all of Huntington, and A. J. Beardsley, McCurdy, W. Va.

W. Va., Huntington.—Windsor Oil & Gas Co. incorporated with \$50,000 capital stock by K. S. Hamilton, F. L. Enslow, Azal McCurdy and others.

W. Va., Morgantown.—Bobtown Oil & Gas Co. incorporated with \$15,000 capital stock by J. H. McGrew, J. C. Pickenpaugh, L. S. Brock and others.

ICE AND COLD-STORAGE PLANTS

Ala., Clanton.—Clanton Bottling Works & Mill Co., W. W. Langley, president, will open bids in 60 days to erect building; ordinary construction; plans being prepared; will install five-ton ice plant. (Recently noted.)

Fla., Pensacola.—Morgan Stock & Ice Co. incorporated with \$100,000 capital stock; W. L. Morgan, president; W. L. Morgan, Jr., vice-president; W. M. Mackey, secretary; W. H. Morgan, treasurer.

Fla., Port St. Lucie (not a postoffice).—It is proposed to construct ice plant. J. H. Rogers, Sewallis Point, Fla., can probably give information.

Ga., Atlanta.—Georgian Ice Co., controlled by Centerfreze Process Co., Oklahoma City, Okla., contemplates establishment of 100-ton plant; arranged that additional units of 100 tons may be supplied; plants may also be established at Augusta, Columbus, Fitzgerald, Cordele and Waycross; H. D. Emerson, 228 Fifth Ave., New York, chief consulting engineer for Georgian Ice Co.; capital stock, \$600,000.

La., Lafayette.—Consumers' Cold Storage & Canning Co., Fernand Mouton, president, will erect iron-clad building for cold-storage plant and canning factory; 30-ton ice plant and 10-ton refrigeration; canning factory from 20,000 to 30,000 cans capacity. (Lately noted.)

La., New Orleans.—Nugget Ice Co. organized by John J. Daly, 824 St. Mary St.; J. M. Heath and others; will establish ice plant.

Miss., Coffeeville.—P. M. Woodall may install ice plant in connection with electric-light plant. (See "Electric-light Plants.")

Tex., Alvin.—Alvin Water, Light & Ice Co. incorporated by L. H. Wallis and others. (See "Water-works.")

Tex., Jasper.—Jasper Ice Co., John H. Seale, president (recently reported incorporated with \$12,000 capital stock) will operate equipped plant of 20 tons daily capacity.

Tex., Liberty.—Liberty Light & Power Co. will establish 5-ton ice plant; construction begun; R. E. Bowen is president. (See "Electric Light and Power.")

Tex., McGregor.—McGregor Ice Co. incorporated with \$13,000 capital stock by W. C. Abel, Alfred Abel, C. T. Pool and J. J. Schradd.

IRON AND STEEL PLANTS

Va., Pulaski.—Pulaski Iron Co. will refine furnace and make repairs to stoves and machinery. (Recently noted.)

LAND DEVELOPMENTS

Ala., Mobile.—Irrington Development Co. incorporated with \$20,000 capital stock by Henry E. Marsh, William Stout, W. T. Waterman, Fred T. Nye, Norman H. Pritchard and Henry C. Fanville, all of Chicago, Ill.; will colonize Irrington, near St. Elmo, located in southern part of Mobile county.

Ala., Pride.—Joseph W. Thompson (recently of Nashville, Tenn.) will improve and cultivate plantation near Pride; contemplates establishment of factory, character of which has not been announced.

Ala., Toinette.—Hooksland Co. incorporated with \$10,000 capital stock by R. D. Hooks, Fred L. Wager and Nonta W. Wager.

Ark., Gilkeson.—Rice.—T. C. Skeen and associates purchased 1000 acres rice land for development. Mr. Skeen is general manager Seminole Land & Lumber Co., Fullerton Bldg., St. Louis, Mo.

Fla., St. Petersburg.—City voted \$15,000 bond issue for Lake Park improvements recently noted; W. F. Divine, City Clerk.

Fla., Tampa.—Chicago & Tampa Bay Land Co. incorporated with \$500,000 capital stock; F. M. Simonton, president; H. H. Honore, vice-president; W. J. Warder, secretary-treasurer.

Fla., Tampa.—Seminole Development Co. (not Seminole Land Co.) is company recently noted incorporated with \$25,000 capital stock to develop Seminole Heights; 40 acres, subdivided into 100 lots; shell roads and pavements to cost about \$10,000; T. Roy Young, president; Fred E. Hutto, vice-president; J. C. Charles, secretary; J. L. Branch, treasurer; R. F. Bettis to have charge of grading, paving and improvements; Mr. Young and others will build residences. (See "Dwellings.")

Ga., Albany.—City voted \$10,000 bond issue for public parks and \$10,000 for improving and maintaining cemetery; N. F. Tift, Mayor. (Lately mentioned. See "Miscellaneous Factories.")

Ga., Camilla.—Jackson Pecan Groves Co. incorporated with \$50,000 capital stock by W. T. Jackson, T. S. Jackson and R. P. Jackson.

La., New Orleans.—Paducah Land Co. incorporated with \$25,000 capital stock by M. Ohlman and F. S. Weis.

Md., Baltimore.—Villa Nova Annex Co., J. Glenn Cook, Jr., general manager, 12 E. Lexington St., will expend about \$20,000 to develop Villa Nova for residential section. (Lately noted.)

Mo., Kansas City.—Southern Development Co. incorporated with \$300,000 capital stock by Hope Thompson, Herbert M. Woolf, Edward Aaron and others.

Mo., St. Louis.—Sarapquin Development Co. incorporated with \$6000 capital stock by Charles A. Lemp, Mark Ewing, Joseph O'Neill and others.

N. C., Asheville.—Robert Lamson, Jr., of New York purchased portion of Ravenscroft property; proposes to divide into building lots, construct street 40 feet wide, remodel building (now on property) as hotel, etc.

Okla., Chickasha.—City will vote in July on \$25,000 bond issue for construction of park and boulevard system. Address The Mayor.

Okla., Kemp.—Kemp Townsite Co. incorporated with \$10,000 capital stock by W. J. Williams of Kemp, George W. Ellis and L. H. Cox of Hendrix, Okla.

S. C., McBee.—McBee Land & Insurance Co. incorporated with \$25,000 capital stock by J. D. Ingram, J. K. McCoy, T. M. Beattie and A. A. McManus.

S. C., White Hall.—Rose Hill Planting Co. incorporated with \$12,000 capital stock by William Jaycocks, S. A. Marvin and others; will purchaser "Rose Hill" plantation.

Tenn., Memphis.—Western Land & Immigration Co. incorporated with \$10,000 capital stock by John B. Vesey, B. H. Cannon, W. W. Yates and others.

Tex., Dallas.—Belmont Land Co. incorporated with \$40,000 capital stock by Rhodes S. Baker, Ben T. Sea and Jeff D. Robinson.

Va., Lynchburg.—Young Men's Christian Association will improve river island; cinder track, tennis courts, baseball diamonds, boating and swimming facilities, etc.; also bridge from city and approach to Rivermont Ave.; \$25,000 available.

Va., Norfolk.—Port Norfolk Holding Co. incorporated with \$10,000 capital stock; W. A. Pollard, president; W. B. Rodman, vice-president; H. C. Sterritt, secretary.

Va., Petersburg.—Battlefield Park Committee (W. E. Harwood, George S. Bernard and others) submitted report on location of proposed Battlefield Park; begin at south bank of Appomattox River and extend south to include two main lines of fortifications to Fort Mahone and Fort Sedgewick; length of territory about three miles and average width 600 yards; about 1000 acres to be acquired, which will include 11 forts; committee recommends that driveway be constructed from Fort Mahone to National Cemetery, four miles; proposed that strip 300 feet wide be acquired, of which 100 feet is to be roadway and 100 feet on each side parkway.

Va., Staunton.—Fruitland Orchards incorporated with \$10,000 capital stock; J. L. Phillips, president; J. Yost, secretary.

LUMBER MANUFACTURING

Ark., Pine Bluff.—Arkansas Short Leaf Lumber Co. incorporated with \$1,100,000 capital stock by R. A. Long, C. B. Sweet and associates of Long-Bell Lumber Co., Kansas City, Mo.; purchased Sawyer-Austin Lumber Co., including 76,000 acres timber land and lumber plant with annual capacity of 40,000,000 feet.

Ala., Sanford.—Henderson Lumber Co. will rebuild planing mill; 75x144 feet, with 26-foot sheds on either side; ordinary construction; cost \$8000; construction by owner. (Recently reported burned at loss of \$50,000.)

Fla., Webster.—W. L. Blocks, Tampa, Fla., purchased Webster Tie Co., properties include 4000 acres timber land, tie and timber-cutting equipment, etc.; will develop timber land; J. H. Tyndale in charge for Mr. Blocks.

Ky., Middlesboro.—Ford Lumber Co. contemplates building lumber plant.

La., Shreveport.—Yellow Pine Lumber Co., W. O. Brice, general manager, contemplates rebuilding factory recently reported burned; plans not made.

La., Kinder.—Peavy-Byrnes Lumber Co. will rebuild sawmill recently burned at loss of \$85,000.

La., Tallahassee.—Ozone Lumber Co., J. R. Pratt, president, Rio, La., purchased timber on 5000 acres of land and will erect circular-saw mill; daily capacity 50,000 feet; machinery purchased; cost of mill and improvements, \$25,000.

La., Tioga.—Lee Lumber Co., S. R. Lee, general manager, will rebuild plant reported burned; will erect 40x200-foot sawmill; wooden structure; cost within \$75,000.

Md., Sykesville.—Wade H. D. Warfield & Co. purchased Sykesville Lumber & Coal Co.; will consolidate and incorporate with \$50,000 capital stock as Sykesville Lumber, Coal & Grain Co.; Wade H. D. Warfield will be president.

Miss., Pineburg.—F. V. B. Price & Co. purchased machinery, with exception of locomotive, for hand mill, etc., recently noted; capacity 60,000 to 80,000 feet per 10 hours; acquired 2200 acres pine, with option on additional land; cost of mill, railroad equipment, etc., exclusive of land, \$38,000. (See "Machinery Wanted.")

Mo., Walsh, P. O. Poplar Bluff.—Paul Lumber Co., W. F. Beitel, president, awarded contract to A. N. Couchman, Greencastle, Ind., to erect sawmill to replace burned structure recently noted; main building 44x114 feet; two stories; engine-room 46x52 feet; mill construction; plans by W. H. Hecker, St. Louis, Mo.; cost of machinery (purchased), \$6000; daily capacity, 30,000 feet of hardwood lumber; may install electric-light plant. (See "Machinery Wanted.")

N. C., Garland.—South River Lumber Co. recently reported incorporated (under Fayetteville, N. C.) with \$25,000 capital stock, purchased plant of Hering & Hall; sawmill, drykilns, planing mills, road, and about 6,000,000 feet timber; W. T. Bowen, president and treasurer of South River Co.; B. C. Hall, vice-president and manager; R. H. Davis, Fayetteville, secretary.

N. C., Stackhouse.—Laurel River Logging Co. increased capital stock from \$150,000 to \$350,000.

Okla., Muskogee.—Sequoyah Land & Lum-

ber Co. incorporated with \$10,000 capital stock by W. J. Strang of Chelsea, Okla.; H. D. Blackwell of Muskogee and C. B. Holtzendorff of Claremore, Okla.

S. C., Charleston.—Tuxbury Lumber Co. will, it is reported, develop extensive tracts of timber land on Cooper River.

Tex., Alvin.—Alvin Lumber Co. incorporated with \$10,000 capital stock by L. H. Wallis, T. P. Major and Robert L. Cole.

Tex., Amarillo.—Amarillo Planing Mill Co. incorporated with \$12,000 capital stock by N. E. Hume, J. D. Anderson and W. P. Cooper.

Tex., Austin.—Hume Lumber Co., Raymond Brummett, manager, will erect plant.

Tex., San Antonio.—Railroad Cross-ties, etc. International Railway Tie Co., New Orleans, La., is considering establishment of branch plant to manufacture cross-ties, poles; estimated cost \$10,000.

Va., Abingdon.—Bradley Lumber Co. incorporated with \$15,000 capital stock; H. G. Bradley, president; J. L. Bradley, vice-president.

Va., Lynchburg.—Lynchburg Lumber Manufacturing Co., R. H. Angell, president, Roanoke, Va., purchased plant of Pierce Lumber & Manufacturing Co.; will operate planing mill, sash, blind and door factory. (Recently noted incorporated with \$50,000 capital stock.)

Va., Morrisville.—Columbia Improvement & Investment Corporation incorporated with \$50,000 capital stock; R. F. Ebert, president; H. C. Johnson, secretary; E. Howard Shadle, treasurer, all of Philadelphia, Pa.

W. Va., Parkersburg.—Parkersburg Mill Co. will rebuild burned sawmill and lumber yards.

W. Va., Blue Jay.—Bee Tree Lumber Co. incorporated with \$100,000 capital stock by P. C. Lynch and A. J. Hamilton of Blue Jay, J. W. Romine of Parkersburg, W. Va., and others.

MINING

Ala., Paint Rock.—Lime and Stone.—Alabama Lime & Stone Co. (recently reported incorporated with \$20,000 capital stock) will develop 500 acres; also build kilns and install pulverizing plant to crush limestone; G. W. Nixon, president; H. M. Smith, Rome, Ga., vice-president; Hunter H. Smith, secretary and general manager.

Ark., Texarkana.—Copper King Mining Co. incorporated with \$25,000 capital stock by A. A. Pierce, H. H. Williams and R. J. O'Dwyer.

Fla., Tampa.—Sand and Shell.—Tampa Sand & Shell Co. incorporated with \$30,000 capital stock; R. W. Thomas, president; W. W. Holmes, vice-president; H. C. Edwards, general manager; Baisden Mickler, secretary-treasurer.

Kentucky.—Lead and Zinc.—American Zinc, Lead & Smelting Co., Boston, Mass., will develop lead and zinc properties; J. C. Wheeler, Jr., vice-president and general manager of Virginia-Kentucky Fuel Co., 539 Union Trust Bldg., Cincinnati, O., is interested; subsidiary company will be formed.

La., New Orleans.—Marble and Granite.—Victor Huber Marble & Granite Co. incorporated with \$30,000 capital stock by Victor Huber, A. J. Derbes, Roger De Roode and others.

Mo., Reeds.—Lead and Zinc.—Reeds Lead & Zinc Co. incorporated with \$50,000 capital stock by J. B. Henry, Peter Merlin, W. H. Smith and others.

Mo., Kansas City.—Tepalcates Mining Co. incorporated with \$10,000 capital stock by Joseph F. Loese, Jacob L. Loese, E. A. Hosier and others.

Mo., Webb City.—Incline Mining Co. incorporated with \$2250 capital stock by Thomas Douglas, J. J. Anderson, T. H. Walker and others.

N. C., Wolf Rock.—P. O. Trap Mill.—Wolf Rock Granite Co., G. W. Hinshaw, president, Masonic Temple, Winston-Salem, N. C., is considering plans for development of granite properties; not yet ready for announcement.

Okla., Davis.—United Mining & Milling Co. incorporated with \$50,000 capital stock by C. C. Surber of Independence, Kans.; Mrs. M. M. Gross of Coffeyville, Kans., and Myers Gross of Davis.

Okla., Miami.—High Five Mining Co. incorporated with \$2500 capital stock by A. P. Stenderfer, E. L. Stenderfer and Ben Stenderfer.

Tenn., Meadow.—Marble.—Meadow Marble Co. contemplates developing additional marble quarries; has 175 acres marble land; no further machinery needed.

Tenn., Meadow.—Marble.—Cumberland Marble Mill Co. contemplates, it is reported, improvements to plant.

Tenn., Memphis.—Stone.—Chickasaw Stone & Material Co. incorporated with \$10,000 capital stock by R. H. Trezevant, R. Lee Bartels, T. J. Turley and others.

Tenn., Washington College, R. F. D. No. 1, Slate, etc.—Tennessee Slate Co. will be name of company to be organized by W. F. Payne, 723 E. Broadway, Louisville, Ky., and A. E. Payne; will develop 22 acres slate and 50 acres cement rock; organization not completed.

Tex., Houston.—Gravel.—New Era Gravel & Development Co. incorporated with \$15,000 capital stock by T. W. Shearer, R. B. Shearer and T. C. McCain.

Va., Axton.—Mica.—George K. Cooper Mica Mining & Manufacturing Co., Danville, Va., incorporated with \$50,000 capital stock; P. J. Boelte, president; George K. Cooper, vice-president; W. W. Ferrel, secretary and treasurer; will develop 359½ acres. (See "Machinery Wanted.")

MISCELLANEOUS CONSTRUCTION

Ark., Pine Bluff.—Canal.—Commissioners of Drainage District No. 2 will dig drainage canal of about 200,000 cubic yards in Jefferson county; bids received until July 3; C. H. Triplett, chairman of board. (See "Machinery Wanted.")

Ark., Texarkana.—Levee.—Commissioners for Improvement District No. 9 awarded contract to Blaine & Ritchey of Texarkana at \$543 for levee work.

Fla., Jacksonville.—Wharf.—John C. L'Engle plans to improve water-front property between Laura and Hogan Sts.; proposed to extend docks to harbor line of river.

Fla., Orlando.—Channel Improvements.—Orange county will improve St. Johns River ferry at Geneva Ave. crossing at mouth of Lake Jessup by deepening, widening and straightening cut-off channel north of present ferry channel and crossing; work will consist of excavation 100x750 feet and average depth of 7 feet, approximating 20,000 cubic yards; bids received until July 17; B. M. Robinson, Clerk Circuit Court. (See "Machinery Wanted.")

Fla., St. Petersburg.—Water-front Improvements.—City voted \$35,000 bond issue for purchase and improvement of water-front lots; W. F. Divine, City Clerk. (Recently noted.)

Ga., Savannah.—Dredging.—Home Dredging Co., Mobile, Ala., lowest bidder at 11.6 cents per cubic yard or \$185,000 for dredging 1,000,000 cubic yards of material from Savannah River and harbor in connection with Government's plans for improving Savannah harbor; proposed to deepen channel opposite city of Savannah, Wrecks Channel and Long Island Crossing Channel; at each locality planned to obtain channel 26 feet deep at mean low water; opposite city and in Wrecks Channel width to be obtained is 450 feet, and in Long Island Crossing Channel 200 feet; length of cut opposite city about 11,200 feet, in Wrecks Channel 7500 feet, and at Long Island Crossing 10,000 to 15,000 feet; Col. Dan C. Kingman is United States engineer in charge.

La., Church Point.—Church Point Corporation, Paul R. Breaux, clerk, will construct levee and bridge recently noted; levee on both sides of Bayou Plaquemine. (See "Bridges, Culverts, Viaducts, etc.")

S. C., Charleston.—Wharf.—Simons-Mayrant Company of Charleston is lowest bidder at \$873 for construction of wharf and landing pier on Vardell's Creek in connection with erection of immigration station; Walker & Burden of Charleston are local architects in charge. (Recently mentioned under "Government and State.")

Tenn., Memphis.—Levee Work.—Mississippi River Commissioners will appropriate \$500,000 still remaining to be distributed for improvements on Western rivers; Capt. Clark S. Smith of Memphis, in charge of river-improvement work for Memphis District, will petition commission for additional appropriation of \$150,000 for levee enlargement in vicinity of Memphis; work is proceeding on revetment construction in Coahoma county, Miss., estimated to cost \$140,000.

Tex., Aransas Pass.—Dredging.—Bids will be received until July 8 for dredging deep-water harbor at Harbor Island, Aransas Pass; G. P. Howell, Major, Engineers, U. S. Engineer Office, Galveston, Tex. (See "Machinery Wanted.")

Tex., Houston.—Retaining Wall.—Weid-Neville Cotton Co. of Houston, Tex., and New York, will construct concrete wall along 800 feet of Brays Bayou and concrete bulkhead and platform 600 feet long. (See "Cotton Compresses and Gins.")

Tex., Orange.—Canal.—Orange county voted \$43,000 bond issue for completion of Sabine-

Neches Canal. Address County Commissioners.

Tex., Velasco.—Wharf.—Velasco Wharf & Improvement Co. increased capital stock from \$100,000 to \$250,000.

Va., Lexington.—Dam.—Moses Bros. will construct concrete dam (to develop 125 H. P.) to replace present wood, log and stone dam; 13 feet high, 200 feet long; two waste gates through center of dam by iron tubes with lift gates in each; will let contract. (Mentioned last week as planned by city.)

Va., Richmond.—Dredging.—Committee on Improvement of James River will receive bids until June 30 for certain dredging along left shore of James River from Gillies Creek to Nicholson St.; Charles E. Bolling, City Engineer; appropriation of \$6000 recently noted. (See "Machinery Wanted.")

Va., Norfolk.—Dredging.—Col. Mason M. Patrick, U. S. A., engineer in charge, recommended bid of Coastwise Dredging Co. of Norfolk at 11 cents per cubic yard for dredging 5,700,000 cubic yards from channel in harbor between Hampton Roads and Junction of Eastern and Southern branches of Elizabeth River; bid of W. L. Randolph, Jr., recently reported as lowest proposal, was rejected. Congress appropriated \$580,000, of which \$216,000 is available. (Further facts lately noted.)

MISCELLANEOUS ENTERPRISES

Ark., Little Rock.—Steamship Line.—Arkansas Steamship Co. incorporated with \$10,000 capital stock by Jeff Hicks, E. A. Botsford and Henry Bernath.

Ark., Pine Bluff.—Publishing.—Twentieth Century Publishing Co. incorporated by W. F. Parker, Perry Martin, Fred G. Hiner, G. W. Seymour and others.

Fla., Tampa.—Chicago & Tampa Bay Naval Stores Co. incorporated with \$500,000 capital stock by A. P. Stuckey (president); R. E. Eaman, Oak, Fla., and C. Huxford, Sparr, Fla.

Ga., Albany.—Gas Plant, etc.—City voted \$50,000 bond issue for purchase of site and erection of gas plant; \$10,000 for public parks; \$10,000 for improving and maintaining city cemetery; \$5000 for new streets; \$12,500 for street paving; \$12,500 for extension of storm and sanitary sewers and water mains; N. F. Tift, Mayor. (Recently mentioned.)

Ga., Atlanta.—Dry Cleaning.—Stoddard Dry Cleaning Co. will erect brick building to cost \$3000.

Ky., Louisville.—Automobile Supplies.—Louisville Auto Supply Co., 618 Fourth Ave., incorporated with \$15,000 capital stock; J. G. Wathen, president; J. A. Serpell, secretary-treasurer; no building.

La., Mansfield.—Publishing.—Mansfield Enterprise Publishing Co. incorporated with \$2000 capital stock by A. M. Rius, C. E. Jenkins and J. B. Elam; will publish Mansfield Enterprise.

La., New Orleans.—Steamship Company.—Mississippi Valley, South America & Orient Steamship Co. incorporated with \$3,000,000 capital stock by James W. Porch, Maurice Stern, J. Wels & Co., Jonas H. Levy and others.

Md., Baltimore.—Motor-truck Service.—United Motor Transportation Co. will be incorporated to furnish motor-truck service for handling merchandise, etc.; plans to establish central garage; capital stock to be \$500,000; organizers, James H. Gaither, manager of transportation, 33 S. Howard St.; John L. Beck, general manager; office at 510 Continental Bldg.

Miss., Gulfport.—Garage.—Coast Auto & Garage Co. incorporated with \$10,000 capital stock by G. B. Dantzler, L. N. Dantzler, D. E. Norris and Seth Matthews.

Miss., Leland.—Hardware.—Johnson Hardware Co. incorporated with \$12,000 capital stock by W. B. Swain, C. C. Johnson and others.

Mo., Carthage.—Garage.—W. C. Bryant is having plans prepared for remodeling garage; erect additional story, 50x110 feet, to be equipped as machine shop; new machines to be installed.

Mo., Kansas City.—Electrical Supplies.—Electric Protection & Supply Co. incorporated with \$100,000 capital stock by F. W. Mackey, P. B. Chaney and Herman Betterhoff.

Mo., St. Louis.—Garage.—Warren Garage & Renting Co. incorporated with \$10,000 capital stock by William Warren, Anna M. Warren and B. O. Nessler.

Mo., St. Louis.—Construction.—Underground Construction Co. incorporated with \$100,000 capital stock by J. P. McDonough, J. S. McDonough, C. C. Creelius, William J. Brennan and others.

N. C., Smithfield.—Garage.—James H. Kirkman and associates purchased Selma Iron & Machine Co.'s plant, including iron and brass foundries; also purchased additional machinery; will erect buildings; J. R. Lewis in charge of machine department.

N. C., Winston-Salem.—Laundry.—Zinzendorf Laundry will enlarge plant; install \$5000 worth of new machinery.

Okla., Alva.—Publishing.—Constructive Enterprise Co. incorporated with \$3000 capital stock by J. F. McDaniel, David Burns and Otis E. Samuels.

Okla., Mountain Park.—Grain Elevator.—Farmers & Merchants' Elevator Co. incorporated with \$5000 capital stock by H. H. Meadows, E. R. Cunningham, D. H. Wynn and T. C. Slack.

Okla., Muskogee.—Garbage Crematory.—City has specifications prepared and will receive bids until 10 A. M. June 27 for construction of garbage incinerating plant; brick, concrete and steel; capacity, 35 tons garbage in 24 hours; chimney 150 feet high. Address The Mayor.

Tenn., Dyersburg.—Printing.—State Gazette, owned by John C. Rogers and Harvey A. Nelson, will erect building; brick and concrete; stone trimmings; fireproof; equip with linotype and presses; each machine operated by individual motor; construction begun.

Tenn., Memphis.—Paving.—Roach-Manigan Paving Co., recently reported incorporated with \$38,000 capital stock, elected M. J. Roach, president; E. P. White and Stanton Palmer, vice-presidents; E. J. Manigan, general manager, and William P. McCadden, secretary-treasurer.

Tenn., Memphis.—Fire Protective Devices, etc.—Akers Fire Protective Co. incorporated with \$10,000 capital stock to succeed Akers & Co.; will represent various manufacturers of fire protective devices, such as fire doors, metal windows, fire extinguishers, fire-escapes, etc.; L. S. Akers and H. B. Hunter will have management.

Tenn., Nashville.—Publishing.—Brooke Publishing Co. incorporated with \$10,000 capital stock by J. L. de Treville, J. L. Brooke, M. J. Draughton, J. S. Laurent and C. H. Sanborn.

Tex., Corpus Christi.—Garage, etc.—Wilson-Howard Auto Sales Co. will erect garage and machine shop; 50x140 feet; brick; cement floors; cost \$5000.

Tex., Dallas.—Automobiles.—Levy-Kramer Automobile Co. incorporated with \$10,000 capital stock by Melville Levy, Irwin L. Kramer and E. L. Pike.

Tex., Dallas.—Grain.—Knight-Steger Grain Co. incorporated with \$10,000 capital stock by R. E. Brooks, A. G. Knight and E. H. Steger.

Tex., Fort Worth.—Elevator.—Fort Worth Elevator Co. increased capital stock from \$100,000 to \$150,000.

Tex., Houston.—Construction.—Bennett Construction Co. incorporated with \$1200 capital stock by W. E. Bennett, Sr., W. E. Bennett, Jr., and J. R. Glasscock.

Tex., McGregor.—Lumber and Fuel.—McGregor Lumber & Fuel Co. incorporated with \$20,000 capital stock by J. T. Davis, W. L. McReynolds and J. H. Smith.

Tex., Paris.—Oil Distributing Station.—Magnolia Oil Refining Co., Beaumont, Tex., will establish oil station; erect complete line of tanks, barns and office building.

Tex., Temple.—Garbage Crematory.—City awarded contract to R. H. Wynne & Co. to erect garbage crematory.

Va., Norfolk.—Automobiles.—Cadillac Auto Hiring Co. incorporated with \$25,000 capital stock; B. F. Batchelder, president; D. F. Gill, vice-president; C. O. Wynn, Jr., secretary-treasurer.

MISCELLANEOUS FACTORIES

Ala., Anniston.—Paint.—Paint, Glass & Builders' Supply Co., W. H. Elam in charge, recently noted to install \$6000 equipment for paint manufacture; will have capacity of about 10 barrels. (See "Machinery Wanted.")

Ala., Birmingham.—Acid Gas.—Sam Worcester, Benjamin Oldham and associates will establish liquid carbonic acid gas plant; cost about \$25,000.

Ala., Decatur.—Ice Cream.—Crescent View Creamery Co. is name of company to erect building and install ice-cream machinery; all arranged for; Joseph A. Chapman, president; Foster H. Pointer, treasurer and manager. (Recently noted.)

Ala., Huntsville.—Acidulating Plant.—Farmers' Cotton Oil & Fertilizer Plant will install acidulating plant. (See "Fertilizer Factories.")

Ala., Paint Rock.—Crushed Limestone.—Alabama Lime & Stone Co., Chattanooga,

Tenn., will build limekilns and install pulverizing plant to crush limestone for agricultural purposes, etc. (See "Mining.")

Ala., Fayette—Plate Glass.—North River Oil & Gas Co., T. L. Woodruff, treasurer, Birmingham, Ala., is reported to have closed contract by which Michigan manufacturers will erect plate-glass plant.

Fla., Jacksonville—Bags.—S. S. Goffin will erect two-story brick building to be equipped for manufacturing cotton and burlap bags for fertilizer, grain, etc.; will organize company with \$50,000 capital stock; temporary plant at 1316 Florida Ave.

Fla., Tampa—Bakery.—Co-operative Sanitary Baking Co., Frederick W. Mohr, president, will install equipment for bakery recently reported incorporated. (See "Machinery Wanted.")

Ga., Atlanta—Wood Pulp.—Georgia Pulp Wood Co. chartered with \$1,000,000 capital stock by Frederick Kauffman and J. L. Anderson of Atlanta and T. R. Lombard of New York.

Ga., Macon—Cut Glass, Cutlery, etc.—J. H. & W. W. Williams Company incorporated with \$30,000 capital stock by J. H. Williams, W. W. Williams, J. B. Williams and J. P. Williams.

Ia., Iowa—Rice.—Sabatier Rice Milling Co. incorporated with \$5000 capital stock; Joseph Birg, president; Frank A. Godchaux, vice-president; Joseph A. Sabatier, secretary-treasurer.

Ia., Lake Charles—Mattresses.—Louisiana Mattress & Furniture Co. will erect building 40x30 feet, to be used for storage and manufacture of mattresses; contract awarded to Adolph A. See.

Ia., New Orleans—Creamery.—Company organized to consolidate Hammond Co-operative Creamery Association and Cloverlands Dairy Co.; two companies have been producing 500 pounds butter daily; also manufacture condensed milk and ice-cream; George A. Villere is president; N. O. Nelson, vice-president; W. R. Irby, second vice-president; George W. Gunn, secretary-treasurer; W. C. Miller, assistant manager.

Ia., New Orleans—Brewery.—National Brewery Co., C. A. Wagner, president, 405 Godchaux Bldg., will erect brewery; two to five stories; daily capacity, 175 barrels beer; plans by John Henry, 516 Hibernia Bank Bldg., New Orleans; cost of plant, \$100,000; cost of machinery, \$80,000; construction by company. (Lately noted.)

Ia., New Orleans—Refrigerators.—Smith Refrigerator Co. incorporated with \$500 capital stock by Philip S. Gidlere, A. H. Ritter, W. J. Kelley and others.

Md., Baltimore—Cotton Pickers.—C. N. Goodwyn, 313 North St., plans organization of company to manufacture pneumatic machine for picking cotton in field; he is the inventor.

Md., Baltimore—Paper Bags, etc.—The Paper Mills Co., Scott, Wicomico and Stockholm Sts., will have plans prepared by Theodore Wells Pietsch, 1001 American Bldg., Baltimore, for addition to plant; large factory building; heavy slow-burning mill construction; brick walls and slag roof; equipment to include four direct-connected freight elevators, fireproof vaults, enclosed fireproof stairways, engine and boiler rooms, electric wiring and complete sprinkler system; when completed entire plant will have area of 45,000 square feet, with 135,000 feet floor space; about 70,000 square feet space for tenants, to be divided to suit; Baltimore & Ohio siding enters building; bids to be asked upon completion of plans.

Md., Fort Howard—Bakery.—Government will erect bakery for U. S. Quartermasters' Department at Fort Howard; building will be 40x60 feet; 2½ stories; concrete; brick and stone; reinforced concrete foundation; slate roof; gas and electric lighting; estimated cost, \$10,000; bids to be opened June 26; Daniel Harding, Towson, Md., is estimating.

Miss., Bogie Chitto—Creamery.—Bogie Chitto Co-operative Creamery Association organized by Dan Bollen, R. L. Brent, J. W. Sasser, W. M. Greer and J. W. Welch.

Miss., Crystal Springs—Mississippi Manufacturing Co. increased capital stock from \$5,000 to \$20,000.

Miss., Gulfport—Marble.—M. F. Petty, Nashville, Tenn., is promoting organization of company with \$10,000 capital stock to establish marble works.

Miss., Hattiesburg—Brooms.—Russell & Lee contemplate enlarging broom factory.

Mo., Kansas City.—W. G. Schae Manufacturing Co. incorporated with \$2500 capital stock by J. E. Buckley, Nellie Hauss, S. C. Douglas and others.

Mo., Kansas City—Curtains.—American Curtain Co. incorporated with \$25,000 capital stock by J. Harry Minor, C. H. Minor and Nelle Minor.

Mo., St. Louis—Shirts.—Rice-Stix Dry Goods Co., David Elsemann, vice-president, purchased site with frontage of 166 feet on which to erect shirt factory; five stories; brick and concrete; fireproof; estimated cost, \$90,000.

Mo., St. Louis.—Morgan-Woodson-Bohn Manufacturing Co. incorporated with \$9000 capital stock by D. E. Morgan, W. C. Woodson and A. D. Bohn.

Mo., St. Louis—Shipping Cases.—Mound City Corrugated Paper Box Co., Cape Girardeau, Mo., leased building at 907-911 S. 22d St., and will equip to manufacture shipping cases. A. H. Johnson is president.

Mo., St. Louis—Clothing.—Princess Manufacturing Co. of Detroit, Mich., is considering, it is reported, establishment of branch plant.

Mo., St. Louis—Bakeries.—General Baking Co. incorporated with \$30,000,000 capital stock, consolidating 21 bread companies in various cities, including McKinney Bread Co. of St. Louis, Vories Baking Co. of New Orleans, Boston Baking Co. of Washington and Juergens Baking Co. of Wheeling; will issue \$5,000,000 of bonds, of which it is planned to issue \$3,500,000 at present; bonds underwritten and will be offered under direction of Harvey Fisk & Sons of New York.

Mo., St. Louis.—Oldsmobile Company of Missouri incorporated with \$10,000 capital stock by W. B. Fewell, C. B. Riggs and Morton Jourdan.

Mo., St. Louis—Dairy.—Swiss Model Dairy Co. incorporated with \$3000 capital stock by Jacob Risch, Anna Risch and John Risch.

Mo., Poplar Bluff—Adding Machines.—Dalton Adding Machine Co. increased capital stock from \$1,000,000 to \$1,500,000.

Mo., St. Louis—Paper Boxes.—McPike Paper Co., John McPike, president, Alton, Ill., leased building at 818-820 N. 8th St. and will, it is reported, establish paper-box factory.

Mo., St. Louis—Storage Batteries.—Guaranteed Electric Storage Battery Co. incorporated with \$2000 capital stock by William D. McClain, Arthur D. Weld and D. G. Tutt.

N. C., Statesville—Tobacco.—J. H. McElwood purchased Atha Chair Co.'s plant, and will probably equip as tobacco factory.

N. C., Wilmington—Wood Distilling.—National Wood Distilling Co., Room 22 Garrell Bldg. (recently noted incorporated), has elected H. M. Chase, president; Thomas W. Pritchard, vice-president; James Kyle, secretary; will install machinery to manufacture turpentine, creosote oils and charcoal. (See "Machinery Wanted.")

Okl., Oklahoma City—Candy.—L. L. Candy Manufacturing Co., F. H. Lynch, manager, will erect 50x140-foot reinforced concrete building and install machinery to manufacture candy. (Recently noted.)

S. C., Columbia—Beverages.—Carolina Gay-Ola Co., 708 Main St., incorporated with \$5000 capital stock; O. E. Thomas, president and treasurer; H. M. Brewer, secretary and manager. (See "Machinery Wanted.")

S. C., Greenwood.—City is considering granting franchise for gas plant; G. W. Gardner, care of Greenwood Journal, is interested. (See "Machinery Wanted.")

S. C., Spartanburg—Mattresses.—W. C. Allen will erect mattress factory and renovating plant.

S. C., Yorkville—Cotton Pickers.—South Carolina Cotton Picker Co. incorporated with \$4500 capital stock by W. W. Lewis and H. E. Nell of Yorkville and J. Brown Nell, Clover, S. C., to manufacture machine for picking cotton in field.

Tenn., Memphis.—Buehl Manufacturing Co. incorporated with \$25,000 capital stock by S. P. Read, R. P. Haberling, E. W. Buehl and W. M. Goodbar.

Tex., Austin—Confectionery.—Capital City Confectionery Co. incorporated with \$20,000 capital stock by S. F. Tubbs, L. M. Montgomery, Charles Petmucky and B. F. Reeves.

Tex., Bryan—Candy.—Bryan Candy Co. incorporated with \$5000 capital stock by J. L. Edge, C. H. Holmes and W. O. Holmes.

Tex., Houston—Refrigerators, etc.—Texas Butchers' Supply Co., L. Oppenheimer, president, Dallas, Tex., will establish plant in Houston for manufacturing refrigerators, cold-storage boxes, butcher-shop fixtures, etc.

Tex., Liberty—Creamery.—Liberty Light & Power Co., R. E. Bowen, president, contemplates establishing creamery; R. E. Bowen, president. (See "Electric-light and Power.")

Tex., South Houston—Motor Trucks.—Commercial Motor Car Co. incorporated with

\$100,000 capital stock to manufacture commercial motor trucks under Twyford patents; purchased Texas Engine & Manufacturing Co.'s building and machinery, also stove-foundry plant, both at South Houston; will produce one truck per day; Z. Z. Brandon, president; R. E. Twyford, first vice-president; L. J. Brandon, secretary-treasurer. (Recently noted under Houston, Tex.)

Tex., Waco—Disinfectants, etc.—Southern Disinfectant Co., J. L. Maulk, manager, 805 Clay St., will open bids August 1 to erect fireproof factory building; 82x265 feet; will equip with electrical machinery to manufacture. (Recently noted organized.)

Va., Fredericksburg—Ice Cream.—Eclipse Ice Cream Co. incorporated with \$10,000 capital stock; G. B. Jones, president; E. J. Embrey, vice president; W. H. Brulle, secretary and treasurer.

Va., Graham—Ice Cream.—William Mitchell will establish ice cream factory; machinery purchased.

Va., Richmond—Tobacco.—R. J. Reynolds Tobacco Co., Winston-Salem, N. C., will erect reinforced concrete boiler-house adjoining factory now under construction; cost of boiler-house \$250.

Va., Salem—Cigars.—Townes Cigar Co. incorporated with \$5000 capital stock; Henry Hill, president, of New York; J. E. Townes, vice president, of Salem, Va.; Marshall Townes, secretary.

Va., Staunton—Organs.—W. W. Putnam & Co., W. W. Putnam, president, will rebuild kiln at organ factory, reported burned; erect patent drykiln.

Va., Tenn., Bristol—Registers.—Universal Account Register Co. removed from Knoxville, Tenn., to Bristol; representatives are J. L. Godsey and associates and Charles M. Harris; \$25,000 capital; new company has also acquired lace-cabinet-making plant of Matthews Manufacturing Co., and will combine manufacture of both products.

W. Va., Glenova, P. O. Wheeling—Glass Tumblers.—Wheeling Tumbler Co., G. O. Smith, president, Wheeling, W. Va., will erect plant to manufacture glass tumblers.

W. Va., Shirley—Gas.—Philadelphia Gas Co., Philadelphia, Pa., will erect gas pumping station; construction begun.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Fla., Jacksonville.—Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., wires Manufacturers Record he is not definitely advised as to any terminal improvements immediately proposed. (Company was recently reported as to expend \$100,000 for such improvements.)

N. C., Spencer.—Southern Railway, D. W. Lum, chief engineer, Washington, D. C., is proceeding with previously-noted improvements; installing turbine pumps and 250-horse-power boiler at pumping station (Yadkin River); connecting same by pipes to 200,000-gallon steel tank in Spencer; boiler shop is steel frame, brick, 100x210 feet, 40 feet high, with riveting tower, equipped with traveling cranes, etc.; two-story brick 50x200-foot storehouse and office building; platform for storage of castings to be rebuilt to 60x325 feet, with 240 feet connecting track.

Tex., Houston.—Galveston-Houston Electric Co. controlled by Stone & Webster Engineering Corporation, 147 Milk St., Boston, Mass., will expend \$50,000 on machine shop and car shed recently noted; mill construction; 160x100 feet. Address Stone & Webster Engineering Corporation, First National Bank Bldg., Houston. (Recently noted.)

Tex., Taylor.—International & Great Northern Railroad, O. H. Crittenden, consulting engineer, Palestine, Tex., will make no improvements in near future. (Recently noted to enlarge shops.)

ROAD AND STREET WORK

Ala., Moulton.—Lawrence County Commissioners are considering \$250,000 bond issue for road construction.

D. C., Anacostia.—Commissioners District of Columbia will improve 14th St. from Good Hope Rd. to V St.; roadways surroundings Logan Park are to be treated with macadamized filling and sidewalks are to be replaced with granolithic pavements; W St. is to be improved from Nichols Ave. to 14th St.

D. C., Washington.—Good Roads Division of Department of Agriculture, Logan Waller Page, director, will construct experimental roadway from Chevy Chase Circle to Bradley La.; \$10,000 appropriated.

D. C., Washington.—Commissioners District

of Columbia will receive bids until June 29 for grading and improving suburban streets and avenues in District of Columbia. (See "Machinery Wanted.")

Fla., Palatka.—City will vote July 11 on \$15,000 bond issue for street paving; Howell A. Davis, Mayor.

Fla., St. Petersburg.—City voted \$35,000 bond issue for brick paving and \$5000 for street crossings; W. F. Divine, City Clerk. (Recently noted.)

Fla., Tampa.—City contemplates bond issue for extensive street paving; D. B. McKay, Mayor.

Fla., Tampa.—Hillsboro and Manatee County Commissioners are considering construction of roadway to make continuous chain of hard roads connecting Tampa with Palmetto; George Fuchs, Hillsboro County Engineer, Tampa.

Ga., Albany.—City voted \$5000 bond issue for new streets and \$12,500 for street paving; N. F. Tift, Mayor. (Lately mentioned. See "Miscellaneous Factories.")

Ga., Monticello.—Colquitt county is considering \$30,000 bond issue for road improvements, construction of steel bridges and erection of jail. Address County Commissioners.

Ga., Oglethorpe.—Macon county will vote on \$150,000 bond issue for road construction. Address County Commissioners.

Ky., Lexington.—Joint Improvement Committee contract (recently noted awarded to Carey & Reed, 426 Perry Bldg., 16th and Chestnut Sts., Philadelphia, Pa.) for construction of asphalt paving comprises work on N. Broadway, W. 3d, Vine and N. Upper Sts., Forest Ave., Maxwell St. and S. Broadway; the latter with vitrified brick; others, sheet asphalt on six-inch concrete base; total yardage, 60,000 asphalt, 10,000 brick; amount \$130,000; P. P. O'Neill, engineer in charge, Lexington.

Ky., Louisville.—Board of Public Works awarded contract to L. R. Figg Company to pave McHenry St. to Hickory, two blocks, and 29th St. from Madison to Chestnut St.; Henry Bickel company, Shelby St. from old to new city limits, four blocks; L. W. Hancock Company, Dandridge St. from Logan to Ellison, three blocks, Swann St. from Oak to Dandridge, Lydia St. from Shelby to McHenry and Brook St. from Lee to Avery St.; prices range from \$1.77 to \$1.90 per square yard.

La., Crowley.—City will construct 300,000 square feet concrete sidewalks; bids received until July 6 R. J. Boudreaux, City Clerk. (Recently mentioned. See "Machinery Wanted.")

La., Franklinton.—Washington parish road contract, recently noted awarded to Boyd & Bradshaw, Columbia, Miss., at \$75,000, is three-years' contract for maintenance of parish roads; 300 miles; no material needed.

La., Kenner.—Board of State Engineers will supervise construction of road from Metairie Ridge to Kenner; convict labor; Gervais Lombard, State Highway Engineer, New Orleans, La.

Md., Baltimore.—City will grade, curb and pave with sheet asphalt on cobble base Calvert St. from north end of bridge over Jones' Falls to North Ave., and Lanvale St. from Charles St. to Greenmount Ave.; bids received until June 28; B. T. Fendall, City Engineer. (See "Machinery Wanted.")

Md., Cambridge.—Dorchester county will grade and construct, with shells or macadam, about two miles of Vienna-Big Mill Rd. between Vienna and Big Mill; bids received until June 21; S. E. LeCompte, president County Commissioners.

Md., Hillsdale.—Baltimore County Highways Commission, Towson, Md., completed survey for concrete curb and gutter through Hillsdale; distance 300 feet; Henry G. Shirley, county Roads Engineer, Towson, Md.

Miss., Como.—City will construct 25,000 yards concrete sidewalks and crossings; bids received until July 4; Robert Ruffin, Mayor. (See "Machinery Wanted.")

Miss., Jackson.—City awarded contract to Southern Asphalt Co., Birmingham, Ala., at about \$47,000 to pave 14,000 square yards on South Gallatin and 6500 yards on Fortification St.

Miss., Vicksburg.—City will pave Belmont St. from Washington to Cherry St. and Grove St. from Washington to First North St.; bids received until July 3; J. J. Hayes, Mayor. (See "Machinery Wanted.")

Miss., Wiggins.—Town contemplates issuing \$5000 bonds during July; A. W. Bond, Clerk. (Recently noted.)

Mo., Belton.—City voted \$10,000 bond issue to macadamize business streets. Address The Mayor.

N. C., Asheville.—Dr. C. V. Reynolds, D. C.

Waddill, C. C. Millard and others contemplate construction of 5-mile macadam "horse-shoe drive," beginning at terminus of Appalachian Highway (recently noted), circle County Club golf course and other grounds, returning to Asheville via Grove Park drive-way.

N. C., Burgaw.—Pender county votes July 25 on road improvements. Address County Commissioners.

N. C., China Grove.—Rowan county will construct 4½ miles of road near China Grove; bids opened June 17; C. M. Miller, County Engineer, Salisbury, N. C.

N. C., Charlotte.—Executive Board will receive bids until 8.30 P. M. July 5 for about 58,400 square yards paving; plans and specifications by Joseph Firth, City Engineer; A. H. Wearn, City Clerk; estimated cost of contemplated paving recently reported at \$150,000. (See "Machinery Wanted.")

N. C., Graphiteville.—S. Montgomery Smith, 35 American National Bank Bldg., Asheville, N. C., and associates will build graded trail to Black Mountain spruce tract recently acquired; Graphiteville to Mt. Mitchell; survey nearly completed; grading begun.

N. C., Mars Hill.—Mars Hill Township voted \$10,000 toward construction of proposed central highway. Address Township Commissioners.

N. C., Tarboro.—City will receive proposals until 4 P. M. July 7 for recently-noted improvements to Main St.; about 25,000 square yards paving; plans and specifications by Gilbert C. White, Durham, N. C. (See "Machinery Wanted.")

N. C., Wilmington.—City will make improvements to Front St., recently noted; bids received until July 15; P. Q. Moore, Councilman, Department of Streets and Wharves. (See "Machinery Wanted.")

Okla., Bennington.—City will construct 12 blocks of 12-foot and 16 blocks of 4-foot cement sidewalks. Address The Mayor.

Okla., Chickasha.—City will vote in July on \$25,000 bond issue for construction of park and boulevard system. Address The Mayor.

S. C., Sumter.—City awarded contract to George W. Waring, Columbia, S. C., to pave six blocks of Main St. with vitrified brick; 3-inch concrete base; 12,000 square yards paving; \$25,000 bond issue voted; W. L. Lee, City Engineer. (Recently mentioned.)

S. C., Sumter.—Sumter county will vote August 1 on \$150,000 bond issue for road improvements; \$30,000 annually for five years.

Tenn., Lexington.—Henderson county will construct road from Madison county line to point two miles west of Lexington; W. F. Appleby, County Judge.

Tenn., Memphis.—City contemplates issuing \$300,000 of bonds for street improvements; E. H. Crump, Mayor.

Tenn., Morristown.—Hamblen county awarded contract to Freeman & Robbins to construct roads.

Tenn., Rutledge.—Grainger county will construct 16½ miles of road; bids received until July 1; \$100,000 bond issue authorized; A. M. Nance, secretary Pike Road Commission. (See "Machinery Wanted.")

Tex., Austin.—Travis county will grade and macadamize North Austin Rd.; bids received until June 26; Thomas E. Ramsey, County Auditor. (See "Machinery Wanted.")

Tex., Bonham.—City will construct about 453 feet concrete curb, 22,645 square yards paving, 1000 square yards grading, 670 feet storm sewer and six catch-basins; bids received until July 15; T. W. Ragsdale, Mayor. (See "Machinery Wanted.")

Tex., Dallas.—City will pave Columbia Ave. from Carroll Ave. to Beacon St.; bids received until June 23; J. B. Winslett, City Secretary. (See "Machinery Wanted.")

Tex., Estelline.—Bond issue of \$40,000 voted for road construction. Address The Mayor.

Tex., Fort Worth.—City awarded contract to Texas Bitulithic Co., Dallas, Tex., to pave Daggett Ave. from Summit to S. Main St., containing 14,373,332 square yards.

Tex., Fort Worth.—City will pave East Front St. from Chamber Ave. to Virginia St., 7,466,666 square yards; bids received until June 29; W. J. Estes, City Secretary; F. J. Von Zuzen, acting City Engineer. (See "Machinery Wanted.")

Tex., Galveston.—Galveston County Commissioners adopted resolution instructing County Road Engineer to prepare plans and specifications, and County Auditor and chairman of causeway committee to advertise for bids for brick or shell roadway on arch bridge portion of causeway and shell road on protected roadway and dirt approaches; estimated that work will require 5575 square yards brick for arch bridge portion and 32,715 square yards of shell paving;

estimated total cost \$18,000 to \$19,000; John M. Murch, County Auditor.

Tex., Marlin.—City will pave business section of Live Oak St. Address The Mayor.

Tex., Rosenberg.—City will vote June 26 on \$75,000 bond issue for building roads. Address The Mayor.

Tex., Seymour.—Baylor County Commissioners are considering \$100,000 bond issue for road construction.

Tex., Temple.—City awarded contract to Ockander Bros., Waco, Tex., to pave 10 blocks of North Main St. with vitrified brick; width, 50 feet.

Va., Boydton.—Boydton, Buckhorn, South Hill, La Crosse and Palmer Springs districts of Mecklenburg county voted bond issue for road construction. Address County Commissioners.

Va., Norfolk.—Bids received until July 9 for concrete walks at St. Helena Reservation, Navy-yard, Norfolk; R. C. Hollyday, chief of Bureau of Yards and Docks, Navy Department, Washington, D. C. (See "Machinery Wanted.")

Va., Portsmouth.—Norfolk & Portsmouth Traction Co. awarded contract to Perry W. Ruth & Co. of Norfolk to pave between tracks and two feet on either side, and laying ties and tracks on 10 streets, including London, Effingham, Harrison, 5th, etc.; about 12,000 square yards paving and 12,000 linear feet track; cost about \$40,000.

Va., Richmond.—Henrico county will construct four miles of gravel road on Creighton Rd. and about three and one-half miles of New Market Rd.; bids received until July 1; P. St. J. Wilson, State Highway Commissioner. (See "Machinery Wanted.")

W. Va., Marlinton.—Pocahontas county will construct road in Edray District and in Little Levels District; bids received until June 27; G. W. Duncan, County Road Engineer. (See "Machinery Wanted.")

SEWER CONSTRUCTION

Ark., Clarksville.—City will construct sewer system; cost \$25,000; John M. Davis, D. Ward Dunlap and A. N. Ragon, Board of Commissioners; O'Neil Engineering Co., Dallas, Tex., will probably install plant.

Fla., Plant City.—City is considering, it is reported, construction of sewer system. Address The Mayor.

Fla., St. Petersburg.—City awarded contract to L. B. Cooper to construct sewer system, including 3500 feet 10-inch and 12,700 feet 6-inch vitrified sewer pipe; W. W. Spencer, City Engineer. (Recently mentioned.)

Fla., St. Petersburg.—City voted \$5000 bond issue for sewer construction; W. F. Divine, City Clerk. (Recently noted.)

Ga., Albany.—City voted \$12,500 bond issue for extension of storm and sanitary sewers and water mains; N. F. Tift, Mayor. (Recently mentioned. See "Miscellaneous Factories.")

Ga., Unadilla.—City voted \$15,500 bond issue for sewer construction. Address The Mayor. (Recently mentioned.)

Ga., Columbus.—City Council is considering construction of new and complete sanitary sewer system. Address The Mayor.

Ga., Winder.—City voted \$21,500 bond issue to construct sewer system; engaged J. B. McCrary & Co., Empire Bldg., Atlanta, Ga., as consulting engineer. (Recently mentioned.)

La., Kentwood.—City contemplates voting on \$50,000 bond issue for sewer system and water-works construction. Address The Mayor.

Miss., Lexington.—City will issue \$62,500 of bonds for water-works and sewers; 6 miles 12-inch to 6-inch pipe sewers; plans by Walter G. Kirkpatrick, Jackson, Miss.

Miss., Vicksburg.—City will construct storm sewers on Grove St. from First North to Washington St., on Belmont St. from Washington to Cherry St., and on Levee St. from China to Clay St.; bids received until July 3; J. J. Hayes, Mayor. (See "Machinery Wanted.")

N. C., Selma.—City contemplates sewerage construction; John A. Mitchener, Mayor. (See "Machinery Wanted.")

Tenn., Memphis.—City will construct sewer in Laurel St. district from Laurel St. pump to Fizer Ave.; 15-inch pipe, 2240 feet; 18-inch pipe, 6500 feet; necessary manholes; Wilson Ave. district, from Wilson Ave. pump to Fizer Ave.; 12-inch pipe, 4600 feet; necessary manholes; main outfall, from Fizer Ave., near S. Willett St., to outfall; 20-inch to 22-inch pipe, 16,000 feet; necessary manholes. Bids received until June 20; Ennis M. Douglass, City Engineer; E. H. Crump, Mayor.

Va., Rocky Mount.—City is having speci-

cations prepared by W. P. Bullock, Kansas City, Mo., to construct sewer system, electric-light plant and water-works; city lately noted as voting \$50,000 of bonds.

Va., Rocky Mount.—City voted \$50,000 bond issue for construction of sewer system, electric-light plant and water-works. Address The Mayor.

TELEPHONE SYSTEMS

Fla., De Land.—Postal Telegraph-Cable Co., Edw. J. Nally, general manager, New York, is reported as to construct line from Jacksonville to De Land and from De Land to Daytona, Fla.

Fla., West Palm Beach.—West Palm Beach Telephone Co. will make extension of 70 miles to telephone lines; has exchange; materials purchased; M. E. Gruber will supervise construction. (City recently noted to grant 20-year franchise.)

Miss., Gulfport.—Falk-McMahon Wireless Telegraph & Telephone Co., New Orleans, La., will erect wireless telegraph station on roof of Great Southern Hotel; station to have range of 3000 miles; install 35-horse-power machine; 200-foot tower; cost \$5000.

N. C., Patterson.—Lenoir-Blowing Rock Telephone Co. incorporated with \$20,000 capital stock by S. F. Harper, Joseph Harper and George Harper to construct and operate telephone system from Lenoir to Blowing Rock via Patterson.

N. C., Rutherfordton.—Rutherfordton Telephone Co. will add overhead cable to telephone system; P. W. Eskridge, engineer in charge; lately noted as increasing capital stock to \$10,000. (See "Machinery Wanted.")

S. C., Gaffney.—Piedmont Telephone Co. contemplates constructing telephone system; cost about \$10,000.

S. C., Spartanburg.—Southern Bell Telephone & Telegraph Co., Atlanta, Ga., will construct copper cables to replace exposed iron wires along principal streets; work begun.

Tenn., Buntyn.—Cumberland Telephone & Telegraph Co., Nashville, Tenn., will erect substation costing about \$25,000. R. Field, Jr., is manager at Memphis, Tenn.

Tex., Austin.—Southwestern Telephone & Telegraph Co. (main office, Dallas, Tex.) will make various improvements to telephone system, expending about \$100,000; planned to place underground conduits and cables along several blocks and to make improvements to telephone exchange on Congress Ave., including extension of switchboard to accommodate 4000 line; work will be in charge of B. H. Johnston, plant supervisor.

Tex., Humble.—Home Telephone Co. incorporated with \$3500 capital stock by F. M. Burton, E. W. Corley and Matt McEntee.

Va., Portsmouth.—Southern Telephone & Telegraph Co., Atlanta, Ga., awarded contract to Myers-Turpin Construction Co., Norfolk, Va., to remodel and enlarge Williams St. exchange building; cost about \$6000.

TEXTILE MILLS

N. C., Mayodan.—Cotton Yarns.—Avalon Mills wire Manufacturers Record that company will at once rebuild burned plant at cost of \$350,000; will have 18,000 mule spindles and accompanying machinery.

Okla., Oklahoma City.—Cotton Goods.—Northern and Southern cotton manufacturers are, it is reported, planning construction of large mill, and I. M. Putnam is endeavoring to secure plant for Oklahoma City.

S. C., Greer.—Sheeting.—Greens Manufacturing Co. will build addition; has bids now; present equipment includes 10,240 ring spindles, 280 looms, etc. (Reported in April as to increase capital stock from \$300,000 to \$350,000.)

Va., Laurel Mills.—Cassimeres, etc.—Rappahannock Woolen Mills Co. will, it is reported, rebuild plant reported burned at loss of \$10,000.

WATER-WORKS

Ark., Clarksville.—City will construct water-works; cost \$30,000; John M. Davis, D. Ward Dunlap and A. N. Ragon, Board of Commissioners; O'Neil Engineering Co., Dallas, Tex., will probably install plant.

Ark., Lake Village.—City will drill deep well at water plant; bids received until July 5; E. R. Toney, Mayor. (See "Machinery Wanted.")

Fla., Port St. Lucie (not a postoffice).—It is proposed to construct water-works; J. H. Rogers, Sewalls Point, Fla., can probably give information.

Fla., St. Petersburg.—City voted \$5000 bond issue for water-works extension; W. F. Divine, City Clerk. (Recently noted.)

Ga., Albany.—City voted \$12,500 bond issue for extension of water mains and storm and sanitary sewers; N. F. Tift, Mayor. (Recently mentioned. See "Miscellaneous Factories.")

Ga., Macon.—City will lay 5003 feet 12-inch pipe, 3140 feet 8-inch pipe, 5363 feet 6-inch pipe, with hydrants, gate valves, etc.; bids received until July 10; John T. Moore, Mayor. (Recently mentioned. See "Machinery Wanted.")

Ga., Jesup.—City voted \$25,000 bond issue for construction of water-works. Address The Mayor.

Ga., Unadilla.—City voted \$12,500 bond issue for extension and improvement of water-works. Address The Mayor. (Recently mentioned.)

La., Kentwood.—City contemplates voting on \$50,000 bond issue for water-works and sewer construction. Address The Mayor.

La., Roseland.—City contemplates artesian well water-works for town use and fire protection; F. G. Benis, chairman committee on site and cost estimates.

Md., Frederick.—City awarded following contracts for improvements to water-works, including furnishing and laying of 1013 tons cast-iron pipe; United States Cast Iron Pipe & Foundry Co., 71 Broadway, New York, at \$21,531.17, to furnish pipe; R. D. Wood & Co. of New York, at \$1075, to furnish valves, hydrants, etc.; Charles Roy, Johnstown, Pa., at \$9641.05, for excavation and laying of pipe; William H. Boardman, engineer, 426 Walnut St., Philadelphia, Pa.; Frank F. Tyeryar, water superintendent. (Recently mentioned.)

Miss., Friar Point.—City will drill artesian well; bids invited; F. G. Proutt, consulting engineer, 374 Randolph Bldg., Memphis, Tenn.; J. D. Robinson, City Clerk. (See "Machinery Wanted.")

Miss., Lexington.—City will issue \$62,500 of bonds for water-works and sewers; water-works: six miles cast-iron mains, two flowing artesian wells, steam or gasoline pumps, masonry, receiving basin and steel standpipe; plans by Walter G. Kirkpatrick, Jackson, Miss.

Miss., Vicksburg.—City will lay water main on Grove St. from Washington to 1st north, and on Belmont St. from Washington to Cherry St.; bids received until July 3; J. J. Hayes, Mayor. (See "Machinery Wanted.")

Mo., Independence.—Interurban Water Co. incorporated with \$50,000 capital stock by M. A. Gallagher, Thomas Madden and Claud S. Gossett.

N. C., Selma.—City will construct water-works; 50,000 to 100,000 gallons tank capacity; water supply from deep wells on Neuse River; John A. Mitchener, Mayor. (See "Machinery Wanted.")

N. C., Tarboro.—City awarded all contracts for water improvements as follows: For construction, at \$15,000, to Edwards Construction Co., Hickory, N. C. (Lately noted.)

Okla., Bennington.—City will construct water-works; cost \$20,000. Address The Mayor.

Okla., McAlester.—City received bids until June 21 for furnishing special duplex pump; 300 pounds working pressure; capacity 900 gallons per minute maximum, 10-inch suction and 8-inch discharge; also 40,250 linear feet 8-inch pipe; W. P. Halliday, City Engineer. (Recently mentioned.)

Okla., Muskogee.—City will receive bids until June 27 for construction of water intake and inlet tower. Alexander Potter, 114 Liberty St., New York, is consulting engineer; T. P. Clonts, City Engineer. (See "Machinery Wanted.")

Okla., Sapulpa.—City voted \$75,000 bond issue for water-works and extension of mains; Burns & McDonnell, Dwight Bldg., Kansas City, Mo., are engineers in charge. (City recently reported as having awarded contract to Southwestern Engineering Co., Oklahoma City, Okla., at \$228,400 to construct water-works; plans call for series of three dams along Rock and Fuchee creeks, with capacity of 1,000,000,000 gallons of water, filter beds and settling basins.)

Tex., Alvin.—Alvin Water, Light & Ice Co. incorporated with \$20,000 capital stock by L. H. Wallis, T. P. Major, F. L. King and others.

Tex., Caldwell.—City awarded contract for construction of steel standpipe; \$6000 bond issue voted; J. A. Gray, Mayor. (Recently mentioned.)

Tex., Dallas.—City will drill five or more artesian wells to woodbine stratum, drill 10 shallow wells and connect about six artesian wells in business district, increasing water supply about 1,000,000 gallons daily; bids for well drilling are invited; J. B. Winslett,

City Secretary. (Further facts recently mentioned.)

Tex., Denison.—City will drill artesian well at Shawnee Reservoir; well to be about 500 feet deep and probably supply 100,000 gallons water daily. Address The Mayor.

Tex., New Braunfels.—City will vote July 11 on \$67,000 bond issue for construction of dam across Guadalupe River and laying of mains from dam to Comal Springs, where pumping station is to be installed to furnish city with water; C. A. Jahn, Mayor.

Tex., Palacios.—City voted \$18,000 bond issue for construction of water-works. Address The Mayor.

Tex., Palacios.—City voted bond issue for construction of water-works. Address The Mayor.

Tex., Olney.—City voted \$12,500 water-works bonds. Address The Mayor.

Tex., Terrell.—City has plans by A. B. Casgrain of Terrell for building to house water and light plants; building will be of concrete and steel; one story; 52x117 feet; concrete floors; coal bunkers with storage capacity of 30 cars and provided with unloading device; contract at \$5950 awarded to Sherwood Concrete & Paving Co., I. C. Sherwood, manager. (Recently mentioned.)

Va., Rocky Mount.—City is having specifications prepared by W. P. Bullock, Kansas City, Mo., to construct water-works, electric-light plant and sewer system; city lately noted as voting \$50,000 of bonds.

Va., Rocky Mount.—City voted \$50,000 bond issue for construction of water-works, electric-light plant and sewer system. Address The Mayor.

W. Va., Heights.—Town voted \$9000 bond issue for construction of water-works. Address Town Clerk.

WOODWORKING PLANTS

Ala., Montgomery.—Sashes, Doors, etc.—Southern Sash, Door & Blind Co. will rebuild plant burned at loss of \$40,000 to \$50,000.

Ark., Black Rock.—Wagon Wood Stock.—N. F. Coffey & Sons Manufacturing Co., Black Rock, Ark., will add ironing department, and iron buggy and wagon singletrees and doubletrees, plow singletrees and wagon neck yokes.

Ark., Fort Smith.—Wheelbarrows.—Western Wheelbarrow Manufacturing Co., Kansas City, Mo., states it will erect buildings in connection with establishment of wheelbarrow factory in Fort Smith; details not determined. (Lately noted.)

Fla., Palatka.—Buckets and Tubs.—Palatka Bucket & Tub Co. will install additional machinery increasing output to 10,000 or 12,000 buckets and tubs daily.

Ky., Rockholds.—Staves, etc.—Kentucky Stave & Tie Co. will install additional equipment to take timber from several thousand acres of land in Harlan county. (See "Machinery Wanted.")

La., New Orleans.—Boxes.—Mendola Bros. incorporated with \$3000 capital stock; Louis G. Mendola, president; Simon Mendola, vice-president; James Willemet, secretary-treasurer.

Md., Baltimore.—Furniture and Store Fixtures.—Ruse & Thompson, 9-11 N. Gay St., purchased factory and warehouse at Low and Stevens Sts.; will improve and equip as furniture and fixtures factory; T. L. Jones, 419 W. Saratoga St., Baltimore, has contract for improvements.

Md., Cumberland.—Doors, etc.—American Trim & Fixture Co. incorporated by Henry B. Kuhn, George H. Merkel, C. Elsworth Rosenmerkle and William Lowdermilk; will manufacture doors, sashes and other building materials.

Mo., Caruthersville.—Cooperage.—Caruthersville Cooperage Co. incorporated with \$15,000 capital stock by L. B. Leroy, J. M. Danby, E. L. Danby and others.

Mo., St. Louis.—Sashes and Doors.—Huttig Sash & Door Co. will rebuild plant at 1206 Manchester Rd., burned at loss of \$600,000.

Mo., St. Louis.—Churn.—Dazy Churn & Manufacturing Co. will erect two-story churn factory; cost \$7500.

Mo., St. Louis.—Boxes.—Mound City Box Factory will build plant replacing factory recently burned.

Mo., St. Louis.—Stairs.—Missouri Stair Co. will build factory replacing plant recently burned.

N. C., Julian.—Chair Stock.—Johnson Chair Co. will establish plant to manufacture chair stock; associated with Liberty Chair Co., Liberty, N. C. (See "Machinery Wanted.")

N. C., Hickory.—Wagons.—Hickory Wagon

Works will, it is reported, double capacity of plant.

N. C., Winston-Salem.—Boxes.—Mengel Box Co., Louisville, Ky., completing plans for box factory; fireproof; mainly reinforced concrete; flat slab method of construction; 200 feet square; steel sash carried on low brick walls; main part of walls to be of glass; three stories; 31,000 square feet on each floor; electric-lighting machinery to be operated by electric motors; steam heat; ventilation system; capacity of plant, 30,000 boxes daily; estimated cost, \$100,000; T. S. Hamilton is company's mechanical engineer.

Tex., Wharton.—Boxes and Barrels.—Wharton Commercial Club, J. G. Furthman, secretary, can give information regarding establishment of \$50,000 box and barrel factory.

Va., Lynchburg.—Lynchburg Lumber Manufacturing Co., R. H. Angell, president, will operate sash, blind and door factory in connection with planing mill. (See "Lumber Manufacturing.")

Va., Newport News.—Wagons.—B. G. Cain is considering establishment of hose-wagon factory.

Va., Portsmouth.—Butter Dishes.—Lay & Balcorn Company will rebuild butter-dish factory recently reported burned at loss of \$40,000.

Va., Tenna., Bristol.—Lace Cabinets.—Universal Account Register Co. (J. L. Godsey and associates) acquired plant of Matthews Manufacturing Co.; will manufacture lace cabinets. (See "Miscellaneous Factories.")

BURNED

Ala., Aubrey.—Shelton Milling Co.'s grist mill; loss \$2000 to \$3000.

Ala., Bay Minette.—Hurricane Lumber Co.'s mill; estimated loss \$75,000.

Ala., Ensley.—Officer Blue's residence, at 23d St. and Avenue F; J. C. Morris' residence.

Ala., Fruitdale.—Frank M. White's residence on N. 3d St.

Ark., Brinkley.—W. K. Sims' residence.

Ala., Hamilton.—P. H. Dunn's sawmill; loss \$1500.

Ark., Hot Springs.—Lester House, owned by Leo Lester; loss about \$5000.

Ala., Montgomery.—Southern Sash, Door & Blind Co.'s plant; loss \$40,000 to \$50,000.

Ark., Leslie.—Linker Hub Co.'s factory; estimated loss \$50,000.

Ga., Devereux.—Monte Bros.' store and three warehouses; loss \$10,000.

Ga., Atlanta.—Southern Railway's oilhouse, etc.; loss \$7000; D. W. Lum, chief engineer maintenance of way and structures, Washington, D. C.

Ga., Sandersville.—Happ Bldg., occupied by Hupp & Paris Company.

Ky., Earlinton.—Dr. W. P. Ross' residence.

Ky., Bethel.—Howell Bros.' sawmill; estimated loss \$2000.

Ky., Whitesburg.—Henry Brown, Sr.'s residence.

La., Clinton.—George J. Reilly & Sons' sawmill; estimated loss \$5000.

La., Covington.—Covington Bank & Trust Co.'s building, loss \$35,000; H. H. Smith's building, loss \$20,000; I. L. Lyons & Co.'s building, loss \$4500; A. J. Harrah's store, loss \$7000; four buildings owned by Jacques Pedont estate, loss about \$8000; Masonic Temple, loss \$35,000; Victor Federick's building, loss \$30,000; Harry Warren's building, loss \$3000; E. J. Frederick's building, loss \$4000.

La., Kinder.—Peary Brynes Lumber Co.'s plant; estimated loss \$85,000.

La., Monroe.—Mrs. Kate Burch's residence, loss \$5000; J. E. Morgan's residence, loss \$3000.

La., Tioga.—Lee Lumber Co.'s saw and planing mills and lumber yard; reported loss \$75,000.

Md., Snow Hill.—Charles Clayhill's residence.

Md., Willows.—Mrs. Margaret A. R. Dorsey's residence.

Miss., Clarksdale.—Gulf Compress Co.'s cotton compress; estimated loss \$200,000.

Miss., Keno.—Charles Branch's sawmill; loss \$10,000.

Miss., Mississippi City.—Oscar Lyons' residence.

Mo., Joplin.—N. T. Oliphant's plant on Southside Mining Co.'s property.

Mo., Joplin.—Jasper county courthouse; loss about \$25,000. Address County Commissioners.

Mo., Moberly.—Peter Stauffer Cornice Co.'s building; A. C. Gladney's building; Selby Hardware Co.'s store; Mrs. Randall's bakery; Wabash Hotel; Barker House; loss \$7000.

Mo., Nevada.—Industrial building at State Hospital for the Insane; loss \$25,000; Herbert S. Hadley, Governor, Jefferson City, Mo.

Mo., St. Louis.—Jack Daniel Distilling Co.'s distillery.

Mo., St. Louis.—William G. Frye Manufacturing Co.'s sash and door works; estimated loss \$250,000.

Mo., St. Louis.—Fathman & Miller's Planing Mill Co.'s plant; Missouri Stair Co.'s plant; Koken Iron Works foundry building, loss \$25,000; Mound City Box Factory; Huttig Sash & Door Co.'s plant at 1206 Manchester Rd., loss about \$600,000; total estimated loss \$1,000,000.

N. C., Hendersonville.—Rev. I. A. Justice's residence; loss \$2500 to \$4000.

N. C., Mayodan.—Avalon Cotton Mills; loss reported as \$250,000.

N. C., Statesville.—J. H. McElweeds' tobacco factory; loss \$10,000 to \$15,000.

Okla., Claremore.—Mayberry Bros.' machine shop, loss \$10,000; J. D. Hearle's blacksmith shop; Chambers & Broeking's blacksmith shop; Marshall Dale's residence; T. H. Patterson's residence.

Okla., Grandfield.—L. D. Bruner's ice plant; loss about \$5000.

Okla., Sapulpa.—Sapulpa Oil Refinery; estimated loss \$100,000.

S. C., Roebuck.—J. M. Switzer's cotton gin.

Tenn., Morristown.—Virginia Hotel, owned by J. S. Crump and J. O. Rice; loss \$10,000 to \$12,000.

S. C., Kingstree.—A. N. Snider's store and dwelling, loss \$10,000; A. S. Coker's residence, loss \$9000.

Tenn., Clarksville.—Dixie Theater; A. Pearson & Co.'s store; New York store, owned by Leo Falk, damaged; total loss about \$30,000.

Tenn., Estill Springs.—Christian Church. Address The Pastor, Christian Church.

Tenn., Jackson.—Wells-Jones Plow Co.'s plant; estimated loss, \$10,000.

Tenn., Jackson.—W. H. Coleman Heading Co.'s plant; loss about \$2000.

Tenn., Memphis.—Mrs. S. B. Loyd's residence at 2166 Monroe Ave., loss \$4000; Mrs. A. J. Fletcher's residence at 2170 Monroe Ave., loss \$4000; C. F. Williams' residence at 2174 Monroe Ave., loss \$4000.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Ala., Mobile.—Louis Forchheimer will open bids about July 1 to July 10 to erect apartment-house; two stories; four flats; fireproof hollow-tile construction; probably hot-water heat; cost \$20,000 to \$25,000; plans by J. Stone, Mobile; address architect. (Recently noted.)

D. C., Washington.—Harry Wardman, 1242 New York Ave., N. W., will erect seven apartment-houses at 15th and R Sts. N. W.; four stories; fireproof; concrete; 70x35 feet each; cost, including site, \$600,000.

La., New Orleans.—Edward Marks will erect apartment-house; two stories and basement; brick and concrete; cost \$18,000.

La., New Orleans.—C. W. Powers will erect frame tenement-house.

Md., Baltimore.—New York Improvement Co. of New York purchased two and a half acres of land on Windsor Mills Rd. from Samuel Siegal, 215-17 Courtland St., Baltimore, and will erect apartment-house to cost about \$250,000; John J. Jackson, president of the company, is reported to erect one apartment-house in suburbs and two in city, one of latter to be 16 stories and cost \$350,000.

Mo., Kansas City.—A. L. Broughal will erect apartment-house; brick; cost \$28,000.

Mo., St. Louis.—Trade Realty & Building Co., 807 Chestnut St., will erect apartment-house; three stories; 25x35 feet; cost \$15,000; steam heat.

Tex., Houston.—Ben M. Levy will erect apartment-house; four apartments; cost \$9000.

Tex., Texas City.—Adam H. McCormick, McComb City, Miss., will erect apartment-house; three stories; is having plans prepared.

ASSOCIATION AND FRATERNAL

Ark., Little Rock.—Benevolent Protective Order of Elks will erect lodge building.

Miss., Gulfport.—Knights of Pythias, Knights of the Maccabees, Woodmen of the

Tenn., McKenzie.—Woolever & Boyd's hoop factory and grist mill; buildings owned by A. C. Ethridge; estimated loss \$1500 on machinery.

Tex., Beaumont.—Dunlap Drug Co.'s store; loss on building \$5000.

Tex., Beaumont.—Two buildings owned by Mrs. Josephine B. Goodhue.

Tex., Denton.—Mrs. T. C. McCormick's residence at 102 W. Hickory St.; loss \$5000.

Tex., Elkhart.—Sanders Milling Co.'s sawmill; estimated loss \$2000.

Tex., Houston.—South Texas Grain Co.'s warehouse at Sawyer and Winter Sts.

Tex., Palestine.—H. Maymon's residence; Mrs. M. J. Mears' residence; cottage owned by George Burkitt of Houston, Tex.; D. C. Bowdoin's residence; loss \$13,000.

Tex., Polytechnic.—Residences of D. T. Swint, D. J. Stovall, Mrs. F. B. Cameron, Charles Barr, T. B. Lewter, Mrs. E. M. Nichols, Mrs. W. H. Black and F. F. Gibbons; total loss about \$12,000.

Tex., Roston.—Burkett & Holding Bldg.; loss about \$6000.

Tex., Whitewright.—Planters' Bank; J. P. Truett's furniture store; J. W. Ashley's store; S. R. Gildewell's jewelry store; May Hotel; Whitewright Grain Co.'s building; I. O. O. F. Hall; Cameron & Son's store; J. W. Davidson's store; J. F. Dixon's store; Dyer & Jones' store; Steinlen & Lively's store; Frank Christian's store; J. F. Diller's store; fire station; city hall; First National Bank; total loss about \$300,000.

Tex., Yoakum.—J. W. Greer's residence; loss \$7000.

Tex., Wills Point.—O. L. Johnson's cotton gin; Wills Point electric-light plant; loss \$10,000 to \$12,000.

Va., Laurel Mills.—Rappahannock Woolen Mills Co.'s plant; reported loss \$10,000.

Va., Norfolk.—Casey Broom Co.'s factory.

Va., Staunton.—W. W. Putnam & Co.'s three seasoning kilns at organ factory; W. W. Putnam, president.

Va., South Boston.—Sam M. Glenn's stables; loss \$3000.

W. Va., Job.—Peter Bros.' store; Ben White's residence, etc.; loss \$18,500.

W. Va., Parkersburg.—Parkersburg Mill Co.'s sawmill and lumber yards.

World and Independent Order of Odd Fellows will organize company to erect \$25,000 joint lodge building.

Tex., Abilene.—Independent Order of Odd Fellows, C. P. Rowland, secretary, has not definitely determined plans to erect lodge building; 50x140 feet; three stories; brick; electric lighting; concrete sidewalks; cost \$25,000. (Recently noted.)

Tex., Corsicana.—Independent Order of Odd Fellows, Dallas, Tex., will receive bids addressed to W. W. Clopton, secretary of trustees, until noon July 11 to erect auditorium; certified check for \$1000; plans and specifications at office of Lang & Wittich, Dallas, Tex.; W. W. Clopton, Corsicana, and John A. Kee, Fort Worth, Tex. (Previously noted.)

Va., Richmond.—Young Men's Christian Association will start campaign to raise at least \$150,000 to erect building.

Tex., Mineral Wells.—Benevolent Protective Order of Elks will erect lodge building to cost about \$25,000; C. B. Raines, chairman of Building Committee.

Va., Norfolk.—Norfolk Lodge No. 38, Benevolent Protective Order of Elks, contemplates erection of lodge building; seven stories; cost not less than \$75,000.

Va., Petersburg.—Young Men's Christian Association contemplates erection of building.

W. Va., Wheeling.—Knights of Columbus are having plans prepared by George S. Mooney, Wheeling, to remodel Carroll Club for lodge purposes, including erection of additional story, porch, etc.

BANK AND OFFICE

Ark., Rison.—Bank organized with \$25,000 capital stock; A. B. Banks, president; will erect bank building later.

Fla., Jacksonville.—Anderson & Holt will erect office building; one story; brick.

Fla., Wauchula.—Bank of Wauchula Building Association will erect bank and opera-house building; two stories; red-pressed

brick; lower floor for bank and stores; upper floor for opera house.

Fla., West Palm Beach.—Anthony Bros. will convert Jefferson Hotel into store and office building. (See "Stores.")

Ga., Dalton.—Bank is reported as being organized with D. B. Barrett, president; will, it is rumored, erect bank building.

Mo., St. Louis.—Monward Realty Co. incorporated with \$2,500,000 capital stock by B. H. Spencer, H. C. White and others; reported to erect office building.

N. C., Ahoskie.—J. W. Powell and J. T. Parker will erect store and office building.

N. C., Southport.—H. W. Hood will open bids about July 10 to erect office and store building; two stories; 30x85 feet; cost \$500. (See "Stores.")

Tenn., Jackson.—First National Bank will remodel and improve bank building.

Tenn., Jackson.—Union Bank & Trust Co. will remodel and improve building.

Tenn., Knoxville.—Hackney Coal Co. will erect office building to replace burned structure; brick construction.

Tex., Palestine.—Palestine National Bank has plans by Harvey L. Page, San Antonio, Tex., for bank building; cost \$75,000.

Tex., Paris.—M. L. Jones will erect office building; one story; 20x105 feet; brick construction.

Tex., Salado.—W. R. Berry will erect building; double; rock construction; one room occupied by bank.

Tex., San Antonio.—Fowler Bros. Land Co., San Antonio, contemplates erection of concrete office building at Fowlerton.

Va., Norfolk.—E. C. Horn & Co., New York, are preparing plans for theater, store and office building. (See "Theaters.")

W. Va., Jane Lew.—Bank of Jane Lew will erect bank building; construction begun.

W. Va., Princeton.—First National Bank is having plans prepared by Pedigo & Gary, Bluefield, W. Va., for bank building; brick and stone; marble trimmings; two stories and basement; 33x53 feet; ordinary construction; hot-water heat; electric lighting; prismatic sidewalks; will open bids about July 1; address architects.

CHURCHES

Fla., De Land.—First Presbyterian Church will receive bids for improvements to edifice; brick over present frame structure; plans by Cairns & Fitchner, De Land. (Previously noted.)

Ga., Madison.—Madison Methodist Church will erect edifice; cost about \$25,000; W. Pete Bearden, chairman of committee.

Ky., Bowling Green.—Central Presbyterian Church will receive bids July 3 for stone and brick veneer construction of edifice; 110x78 feet; cost \$35,000 to \$40,000; plans by Runge & Dickey, Nashville, Tenn.; contract for foundation awarded to W. F. Ennis, Bowling Green; address R. C. Posey. (Recently noted.)

La., Natalbany.—Methodist Episcopal Church will erect proposed edifice; construction begun. Address The Pastor of Methodist Episcopal Church.

Md., Baltimore.—Church Extension Society of Methodist church is having tentative plans prepared by Owens & Sisco, 1805 Continental Bldg., Baltimore, for proposed edifice at Washington and Lanvale Sts.

Md., Baltimore.—McGruder Powell, National Bank of Commerce, may be addressed relative to erection of edifice for West Forest Park Baptist Mission; plans not determined; cost \$15,000. (Previously noted.)

Miss., Laurel.—First Methodist Episcopal Church South is having plans prepared for proposed edifice; cost \$30,000. Address The Pastor, First Methodist Episcopal Church South.

Miss., Meridian.—First Presbyterian Church is having plans prepared for proposed edifice to cost at least \$40,000. Address The Pastor, First Presbyterian Church.

Mo., St. Louis.—St. Paul's Episcopal parish, Rev. Fred Downlock, rector, will erect edifice; stone construction; plans by Roth & Study, St. Louis.

N. C., Raleigh.—St. Ambrose Episcopal Church, Rev. J. K. King, rector, is planning to erect edifice.

N. C., Raleigh.—Christian church, Rev. L. F. Johnson, pastor, will erect edifice to replace present structure.

N. C., Wilmington.—Church of Good Shepherd has plans by Upjohn & Conabel, New York, for edifice; Old English style; transept, choir room, organ loft, etc.; seating capacity 400.

Tex., Houston.—Sacred Heart Church will

erect edifice; construction begun; Rev. N. A. Gallagher, bishop, Galveston, Tex.

Okla., Muskogee.—Charles Seeking is interested in erection of edifice.

Va., Lynchburg.—St. John's Episcopal Church purchased site to erect proposed edifice; S. G. Stevens, George Mahon and Mayo C. Brown, trustees.

CITY AND COUNTY

Ala., Gadsden.—Auditorium.—J. B. Wadsworth and J. F. Lane interested in erection of proposed auditorium. (See "Miscellaneous Structures.")

Ark., Walnut Ridge.—Jail.—Lawrence county will receive bids through S. E. Spikes, Commissioner, until June 26 to erect jail; plans and specifications at office of Judge J. D. Doyle at the courthouse at Walnut Ridge.

Fla., Kissimmee.—Jail, etc.—Osceola County Commissioners will receive bids until noon July 3 to erect county jail and sheriff's residence in accordance with plans and specifications on file in office of Clerk of Circuit Court; certified check for 10 per cent. amount of bid; bidders to submit working models of locking device they propose to use and samples of steel work which they propose to put in toolproof cells; bids will be as follows: Bid "A" for entire building and jail equipment; bid "B" for building part of jail alone as specified in exhibit "A"; bid "C" for all of miscellaneous steel and iron delivered on cars to Kissimmee and all cell work erected, including plumbing for same, all specified in exhibit "B"; usual rights reserved; E. L. Lesley, chairman. (Previously noted to receive bids until April 3.)

Fla., St. Petersburg.—Jail.—City Council will receive bids until July 6 to erect jail; brick; certified check for \$50; plans and specifications at office of chief of police, under supervision of building committee; W. F. Divine, City Clerk.

Fla., Sumterville.—Jail.—Sumter County Commissioners plan to erect \$10,000 jail. (See "Courthouses.")

Ga., Atlanta.—County Building.—Fulton County Commissioners will expend \$3700 to remodel building at Pryor and East Hunter Sts.

Ga., Atlanta.—Hospital.—Board of Trustees of Grady Hospital plans to expend \$4500 for roof garden equipped for sanitarium.

Ga., Jesup.—City Hall.—City contemplates issuance of \$5000 of bonds to erect city hall. Address The Mayor.

Ga., Moultrie.—Jail, etc.—Colquitt county contemplates issuance of bonds to erect jail, steel bridges over street and for road improvements.

Ky., Louisville.—Hospital.—John H. Leathers, chairman Hospital Commission, states that plans have been completed for proposed city hospital; temporary structure will be completed about July 1, when old structure will be razed and new hospital commenced about September 1; \$1,000,000 available; D. X. Murphy & Bro., Louisville, recently noted to prepare plans.

Ky., Middlesboro.—Library.—City will erect Carnegie library; cost \$30,000. Address The Mayor.

Md., Baltimore.—Hospital.—Sydenham Hospital, Eastern Ave. ext., Dr. W. P. Morrill, superintendent, will erect addition for measles patients; 40x100 feet; one story; ordinary construction; steam heat; electric lighting; cost \$30,000; plans by Parker, Thomas & Rice, Union Trust Bldg., Baltimore; date of opening bids not set.

S. C., Orangeburg.—Fair Buildings.—Orangeburg County Fair Association will erect fair buildings, etc. (See "Miscellaneous Structures.")

S. C., Rock Hill.—Library.—Rock Hill Free Library Association contemplates erection of Carnegie library; fireproof; electric lighting; cost \$20,000.

Tenn., Memphis.—City Hall.—J. M. Acker, Mayor, will receive bids until 5 P. M. July 3 to erect city hall, etc. (See "Schools.")

Tex., Lockhart.—City Hall.—City will erect city hall. Address The Mayor.

Va., Norfolk.—Fire Station.—Board of Control will receive bids until 12:30 P. M. June 26 to erect fire station at Williams Ave. and 12th St.; certified check for \$500, payable to City Treasurer; plans and specifications at office of B. F. Mitchell, architect, 500 Seaboard Bank Bldg., Norfolk.

Va., Portsmouth.—Office.—City will expend about \$40,000 to erect clerk's office; fireproof construction.

Va., Roanoke.—Convention Hall.—City contemplates erection of convention hall to seat 6000; cost \$25,000 to \$30,000. Chamber of Commerce is interested.

Va., Norfolk.—Morgue.—Board of Control opened bids to erect morgue; B. O. Williamson of Norfolk is lowest bidder at \$1304.50; plans by John Keenan Peebles, Norfolk. (Recently noted.)

COURTHOUSES

Fla., Sumterville.—Sumter County Commissioners plan to erect \$30,000 courthouse and \$10,000 jail.

Fla., Titusville.—Brevard County Commissioners will levy tax to erect courthouse.

Ga., Savannah.—Liberty county will receive plans and specifications until noon July 5 to erect brick courthouse; E. C. Miller, clerk of County Commissioners.

Ky., Frankfort.—Mercer County Commissioners plan to levy tax to erect courthouse.

Ky., Hazard.—Perry County Fiscal Court invites architects to submit plans and specifications for \$25,000 courthouse; selection made July 28 at Hazard; county to pay for plans adopted. Address J. G. Campbell, County Judge, Hazard.

Tex., Aspermont.—Stonewall County Commissioners will receive bids until July 5 to erect brick and stone courthouse; certified check for \$500, payable to W. J. Arrington; plans and specifications at office of Mr. Arrington, at Aspermont, or Elmer G. Withers, architect, Stamford, Tex., or may be had on deposit of \$10; R. S. Tillotson, County Clerk.

Tex., Jourdanton.—Atascosa County Commissioners will erect \$75,000 courthouse.

W. Va., Marlinton.—Bids received by Pocahontas County Court, C. J. McCarty, Clerk, until June 27 for following improvements to courthouse: (1) For reconstruction of tower and repairs to roof; (2) for construction of tower and changing size of same; (3) for construction of copper gutters and valleys complete around courthouse eaves, copper furnished by county; (4) lightning-rod system; each bidder to furnish complete plans for this portion of work.

DWELLINGS

Ala., Gadsden.—D. H. J. Savage, Tolson Bldg., will erect bungalow.

Ala., Troy.—Dr. R. B. Chapman will erect residence; two stories.

D. C., Washington.—Kennedy Bros., 1334 H St. N. W., will erect 15 dwellings at 6th, 7th, D and E Sts. N. E.; six rooms and bath.

D. C., Washington.—James J. Richardson, 1016 14th St. N. W., will erect residence at Massachusetts Ave. and 20th St. N. W.

D. C., Washington.—Elle Fabre, 2554 Wisconsin Ave. N. W., will erect two dwellings on Wisconsin Ave. near Davis St.

D. C., Washington.—Granville Fortescue is having plans prepared by Wood, Donn & Deming, 808 17th St. N. W., Washington, for residence on Massachusetts Ave. between 24th and 25th Sts.

D. C., Washington.—James D. Burns, 1000 3d St. N. E., has plans by S. R. Turner for 10 dwellings at 301-19 Tennessee Ave. N. E.; two stories; brick; cost \$25,000; construction by owner.

D. C., Washington.—W. A. Craig & Co., 3638 11th St. N. W., will erect seven dwellings on C St. N. E.; cost \$2500.

D. C., Washington.—H. R. Howenstein, 1314 F St. N. W., will erect dwelling at 337 10th St. N. E.; two stories; cost \$3000; plans and construction by owner.

D. C., Washington.—C. E. Wire, 1413 H St. N. W., has plans by W. J. Wire for dwelling at 1248 Columbia Rd. N. W.; three stories; brick; cost \$3500.

D. C., Washington.—Kennedy Bros., 1334 H St. N. W., have plans by A. H. Sonneman, Chevy Chase, Md., for eight dwellings at 610-24 Lexington Ave. N. W.; two stories; brick; cost \$32,000; construction by owner.

D. C., Washington.—H. R. Howenstein, 1314 F St. N. W., will erect three dwellings at 1007-11 D St. N. E.; two stories; brick; cost \$3000; plans and construction by owner.

D. C., Washington.—E. N. Hopewell, Fendall Bldg., has plans by A. Hall, Evans Bldg., Washington, for three dwellings at 635-39 M St. N. W.; two stories; brick; cost \$15,000; construction by owner.

D. C., Washington.—Dr. A. C. Merriam, 1201 New Jersey Ave. N. W., has plans by Samuel R. Turner, 613 M St., to erect seven brick dwellings on C St. and Tennessee Ave.

Fla., Fort Myers.—Dr. A. P. Hunter will erect residence; brick; colonial style; cost several thousand dollars.

Fla., Jacksonville.—H. F. Mizelle will erect dwelling; two stories; frame.

Fla., Jacksonville.—Charles H. Montgomery will erect four dwellings; one story; frame.

Fla., Lakeland.—W. F. Gwynn is having plans prepared by Guy Platt Johnson, Lakeland, for residence; cost \$18,000; also plans to erect bungalow; cost \$2000.

Fla., St. Augustine.—H. L. Beeman will erect residence.

Fla., Tallahassee.—Lewis M. Lively will erect residence.

Fla., Tallahassee.—Herman Gunter will erect residence.

Fla., Tallahassee.—John Henderson will erect residence.

Fla., Tampa.—J. A. Bedingfield will erect bungalow to cost \$3500.

Fla., Tampa.—J. F. Senour, Jr., will erect bungalow; cost \$3500.

Fla., Tampa.—T. Roy Young is having plans prepared by Bonfoey & Elliott, Tampa, Fla., for \$4000 dwelling. (See "Land Developments.")

Ga., Atlanta.—Tom Bradley will erect eight dwellings; one story; cost \$15,000.

Ga., Atlanta.—All Saints' Episcopal Church has plans by Morgan & Dillon, Atlanta, for rectory; two stories; red stone; eleven rooms; cost \$12,000.

Ga., Augusta.—Miss Annie Dow will erect residence; two and a half stories.

Ga., Atlanta.—B. D. Watkins will erect dwellings at 10 Waverly way and 8 Oakdale Rd.; cost, respectively, \$1500 and \$7500.

Ga., Atlanta.—Western & Atlantic Construction Co. will erect one-story dwelling at 133 Peoples St. to cost \$3000, and two dwellings at 320-28 Gordon St., frame construction, to cost \$3500 and \$3750.

Ga., Macon.—Mrs. M. R. Rodgers will erect residence; frame; veneered brick.

Ga., Moultrie.—G. F. Taylor will erect residence to cost \$25,000.

Ga., Savannah.—John E. Driscoll will erect residence.

Ga., Savannah.—Schulhafer & French will erect two dwellings; two stories; cost \$8000.

Ky., Louisville.—Fred Erhart will erect residence; two stories; frame; cost \$3000.

La., New Orleans.—Miss C. L. Peters will erect three cottages; two stories; double; cost \$3166 each.

La., New Orleans.—Mrs. R. Pendergrast will erect dwelling; two stories; cost \$3550.

La., New Orleans.—Ept Rosenberg will erect residence; two stories; cost \$5000.

Md., Baltimore.—Louis H. Plinius has plans by Henry J. Tinley, 314 N. Charles St., Baltimore, for six dwellings on Beech Ave. between Garrison Ave. and 12th St.; two and a half stories; brick; 16x19 feet; slate or tin roof; steam heat; cost about \$2500 each.

Md., Baltimore.—James Keely, 330 Oliver St., has plans by Jacob F. Gerwig, 210 E. Lexington St., Baltimore, for 11 dwellings and five stores and dwellings on Calverton Rd.; two stories; cost \$25,000.

Md., Baltimore.—J. W. Crook, 417 Exchange Pl., will erect dwelling at Charles and 23d Sts.; Colonial brick; white marble trimmings; green slate roof; white enameled woodwork and mahogany doors; plans by Howard Sill, 11 E. Pleasant St., Baltimore.

Md., Baltimore.—John F. Kenney is having plans prepared by George R. Morris, Gunther Bldg., Baltimore, for residence on Powhatan Ave.; two and a half stories.

Md., Baltimore.—John F. Carter, Pimlico Blvd., will erect 26 dwellings at Piedmont Ave. and 10th St.; two stories; brick; twin construction; porch fronts; steam heat; electric lights.

Md., Baltimore.—James S. Donahue, 411 E. 22d St., will erect 13 dwellings at 23d St. and Old York Rd.; two stories; brick; cost about \$22,100.

Md., Baltimore.—Wm. F. Southcomb, 108 E. Baltimore St., is having plans prepared by Glidden & Friz, Glenn Bldg., Baltimore, for residence at Roland Heights; two and a half stories; frame and stucco; 28x40 feet; ordinary construction; hot-water heat; cost \$7000.

Md., Roland Park.—Edmund S. Dickey, The Walpert, Charles St. and Lafayette Ave., Baltimore, Md., has plans by Howard Sill, 11 E. Pleasant St., Baltimore, Md., for residence; two and a half stories; brick; interior trimmings of tile and terrazo work; cost about \$40,000; contractors estimating are Gladfelter & Chambers, 2072 Woodberry Ave.; John Cowan, 106 W. Madison St.; W. E. Harn & Co., 213 N. Calvert St.; Milton C. Davis, 15 E. Fayette St., all of Baltimore, Md. (Previously noted.)

Md., Round Bay (not a postoffice).—Daniel R. Randall of Annapolis, Md., will erect bungalow.

Mo., Kansas City.—William F. Tilton, superintendent of Bradley-Alderson Company, will erect residence.

Mo., Kansas City.—John B. Pollard, president of Gate City National Bank, will erect residence.

Mo., Kansas City.—J. E. Ramp will erect residence; brick veneer; cost \$3500.

Mo., Kansas City.—P. J. Schwickrath will erect residence; brick veneer; cost \$3000.

Mo., Kansas City.—Lyman Reid will erect residence; stone; cost \$15,000.

Mo., Kansas City.—M. J. Scott will erect dwelling; frame; cost \$6000.

Mo., Kansas City.—I. B. Nordyke will erect residence; stone veneer.

Mo., Kansas City.—J. A. Calvin will erect residence; frame; cost \$6000.

Mo., Kansas City.—H. W. Snow will erect residence; stone veneer; cost \$4000.

Mo., Kansas City.—R. C. Walton will erect dwelling; stone; cost \$5000.

Mo., Kansas City.—M. T. Hale will erect dwelling; stone veneer; cost \$3000.

Mo., Kansas City.—L. C. Watson will erect six dwellings; frame construction; cost \$9000.

Mo., St. Louis.—St. Englebert's Church will expend \$4000 for alterations and addition to residence at 4328 Marcus St.

Mo., St. Louis.—American Real Estate, Building and Investment Co. will erect 10 seven-room residences and three five-room cottages.

N. C., Charlotte.—W. W. Wyatt, Jr., will receive bids at once to erect dwelling; 8 rooms; ordinary construction; hot-water heat; electric lighting; cost \$4000; plans by Louis H. Asbury, Charlotte. (Recently noted.)

N. C., Charlotte.—J. C. Patton will expend \$7000 to erect dwelling; 8 rooms; ordinary construction; hot-water heat; electric lighting; plans by Louis H. Asbury, Charlotte. (Recently noted.)

N. C., Concord.—J. F. Cannon will expend \$15,000 to erect dwelling; 13 rooms and bath; ordinary construction; hot-water heat; electric lighting; Louis H. Asbury, architect, Charlotte, N. C.; plans ready for bids. (Recently noted.)

N. C., Raleigh.—Henry T. Hicks will erect residence.

N. C., Salisbury.—Frank R. Brown has plans by Hook & Rogers, Charlotte, N. C., to erect three dwellings; 40x40 feet; 8 rooms; brick veneer; electric lighting; cost \$4000 each. (See "Machinery Wanted.")

N. C., Wadesboro.—First Baptist Church will erect parsonage. Address The Pastor, First Baptist Church.

Okl., Oklahoma City.—A. M. DeBolt will erect residence; reinforced concrete, gray pressed brick, stone and metal construction; 24 rooms; cost \$25,000.

Okl., Oklahoma City.—W. F. Watson will erect dwelling; brick; cost \$5000.

Okl., Oklahoma City.—R. W. Roberts will erect residence; frame; cost \$3000.

Tenn., East Lake.—Dr. E. B. Anderson, 8th and Market Sts., will erect dwelling; frame; shingle roof.

Tenn., Memphis.—Bids received by Alsop & Smith, architects, Memphis, until June 21 to erect residence for president of West Tennessee Normal School; plans on deposit of \$10; structure to cost about \$29,000.

Tenn., Theta.—Methodist church will erect parsonage. Address The Pastor, Methodist Church.

Tex., Bryan.—A. W. Wilkerson, cashier of City National Bank, will erect residence.

Tex., Hearne.—Sam Lipsitz will erect residence; two stories.

Tex., Lockhart.—J. J. Lissner will erect residence.

Tex., Lockhart.—R. A. Beatty will erect residence.

Tex., San Antonio.—Mrs. G. Bedell Moore will erect residence.

Va., Richmond.—Mrs. Emma C. Gordon will erect detached residence; three stories; brick.

Va., Roanoke.—H. C. Elliott of Elliott & Cassell will erect two residences.

Va., Roanoke.—R. B. Griggs will erect residence; two stories; brick cased; cost \$3500.

Va., Roanoke.—Philip Sonn will erect residence; two stories; brick cased; cost \$3000.

GOVERNMENT AND STATE

Fla., Key West.—Weather Bureau.—United States Department of Agriculture, Office of Secretary, Washington, D. C. Sealed proposals received by Secretary of Agriculture until noon July 18 for erection of two-story-and-cellar cement and terra-cotta building for Weather Bureau, United States Department of Agriculture, at Key West, Fla., in accordance with plans and specifications

which may be obtained from observer, Weather Bureau, Key West, Fla., and at office of Chief of the Weather Bureau, Washington, D. C.; bids must be sealed and endorsed on envelope "Proposals for Weather Bureau Building, Key West, Fla.," and addressed to Chief of the Weather Bureau, Washington, D. C.; the department reserves the right to reject any or all bids; Willis L. Moore, acting Secretary.

Ky., Lakeland.—Tuberculosis Hospital.—Kentucky State Board of Control is having plans prepared by D. X. Murphy & Bro., Louisville, Ky., for tuberculosis hospital building as addition to Central Kentucky Asylum for the Insane; cost about \$9000.

S. C., Charleston.—Immigrant Station.—Treasury Department, James Knox Taylor, supervising architect, Washington, D. C., will receive bids through Walker & Burden, architects, Charleston, until July 15 to erect main building for immigrant station; two stories; concrete framework; hollow tile walls; cement floors; hot-water heat; electric lights. (Recently noted.)

Tex., Cleburne.—Postoffice.—James Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C., will receive bids until July 25 at 3 P. M. for construction, including plumbing, etc., of United States postoffice; drawings and specifications on file at office of custodian of site at Cleburne or at office of architect.

W. Va., Welch.—Miners' Hospital.—Bids received by State Board of Control of West Virginia until noon June 22 to erect three wards at Miners' Hospital No. 1 according to plans and specifications filed at following places: Office of Bluefield Telegraph, Bluefield, W. Va.; office of Herald-Dispatch, Huntington, W. Va.; office of Miners' Hospital No. 1, Welch; office of State Board of Control, Charleston, W. Va.; certified check for \$200; bids to be marked "Bid on Work at Miners' Hospital No. 1."

HOTELS

Fla., Lakeland.—Lakeland Hotel Co. is having plans prepared by Guy Platt Johnson, Lakeland, for proposed hotel; four stories; dark flash brick with buff trimmings; 172x122 feet; lobby 30x39 feet, with ceramic mosaic floors; dining-room 57x59 feet; fire escapes; steam heat; circulating hot and cold water; elevator service; interphone system; cost about \$89,000.

Fla., Jacksonville.—C. T. Doty will erect hotel at Adams & Washington Sts.; three stories; 10 sleeping-rooms and four baths on each floor; six stores on ground floor; brick construction; 40x101 feet.

Fla., Tampa.—La Plaza Hotel Co. incorporated with \$25,000 capital stock; George R. Macfarlane, president; E. Pendas, vice-president; W. D. Whitaker, secretary-treasurer.

Ga., Macon.—Midland City Hotel Co. accepted plans by W. L. Stoddard, New York, for hotel; 10 stories; fireproof construction; 111x129 feet; 250 rooms; cost about \$350,000. (Recently noted.)

Ga., Macon.—Midland City Hotel Co. will open bids about August 15 to erect hotel; 200 rooms; fireproof construction; cost \$350,000; details not determined; plans being prepared by W. L. Stoddard, 30 W. 38th St., New York; address architect. (Recently noted.)

La., Donaldsonville.—Favrot & Livaudais, architects, 839 Gravier St., New Orleans, La., will receive estimates for erection of hotel; four stories; brick; plans and specifications at their office as above.

Mo., St. Louis.—Henry C. Haarstick will erect two additional stories to building at 704-06 Pine St.; 48x107 feet; cost about \$40,000; will be leased by Joseph W. Duffy for hotel.

N. C., Ahoskie.—J. H. Mitchell & Son are reported to erect store and hotel building. (See "Stores.")

N. C., Asheville.—Roger Lamson, Jr., of New York city is reported to have purchased Ravenscroft Hotel and will remodel, add 20 rooms, private baths, ballroom and install telephones in each room.

N. C., Asheville.—Gay Greene and John Lange will expend \$300,000 to erect hotel previously noted; 200 rooms; fireproof reinforced concrete; one freight and two passenger elevators; plans by R. S. Smith, Asheville; day labor; heating and plumbing contract let to J. C. McPherson, Asheville. (See "Machinery Wanted.")

S. C., Sumter.—L. D. Jennings, chairman of committee, is promoting erection of proposed \$100,000 hotel.

Tex., San Antonio.—Fowler Bros. Land Co., San Antonio, plans to erect hotel at Fowler-

Tex., Waco.—Company will be organized to erect hotel to cost not less than \$250,000; F. E. McLarty, cashier of Central Texas National Bank, is chairman of committee.

Tex., Wharton.—G. A. Harrison & Co. will, it is reported, erect hotel; four stories; 50 rooms; electric lights; 58x90 feet; cost \$20,000.

Va., Lynchburg.—Chamber of Commerce (acting for owners), O. B. Barker, chairman, will open bids in about 30 days to erect hotel; five stories, with carrying capacity for two additional stories; 140x132 feet; fireproof construction; heating not determined; two electric passenger elevators; cost \$250,000. (Recently noted.)

MISCELLANEOUS

Ala., Gadsden.—Auditorium.—J. B. Wadsworth of Etowah Trust & Savings Bank, and J. F. Rush of Gadsden National Bank, represent churches of Gadsden interested in erection of proposed auditorium to seat 1500 to 2000 to be donated to city.

Fla., Jacksonville.—Armory and Auditorium. Jacksonville Board of Trade is promoting erection of auditorium and armory building to seat about 10,000; Ben Burbridge, chairman of committee.

Fla., Lakeland.—Clubhouse.—Guy Platt Johnson is preparing plans for proposed clubhouse at Lakeland Highlands; cost \$16,000.

Ga., Athens.—Clubhouse.—Cloverhurst Country Club will erect clubhouse.

Ky., Maysville.—Car Barn.—Maysville Street Railway Co. will erect car barn; fireproof construction; probably brick and steel.

Mo., St. Louis.—Dispensary.—Jewish Charity Educational Board will erect dispensary; cost \$3000.

Mo., St. Louis.—Orphanage.—Christian Orphans' Home will erect building to cost \$25,000.

N. C., Raleigh.—Hospital.—Central Hospital for Insane and Epileptics will install separate electric-light plant to cost \$7000. Dr. James McKee is superintendent.

N. C., Raleigh.—Orphanage.—Methodist Orphanage will erect additional boys' dormitory.

Okl., McAlester.—Armory.—Tal Millwee has plans by N. Bergeron, 200-201-202 E. Choctaw St., McAlester, for proposed armory building for Company D, Oklahoma Guards; two stories; red brick; buff brick and white cottage stone trimmings; main hall floor 99x49 feet; seating capacity 400; stage 18x28 feet; fireproof; roof supported by five steel trusses; fireproof plaster gypsum partitions; locker arrangements planned by Colonel Fitzpatrick of Oklahoma City, Okla.; cost about \$12,000.

Okl., Oklahoma City.—Hospital.—Dr. F. K. Camp will erect hospital; 75x140 feet; four stories, basement and solarium on roof; telephone in each room; cost \$75,000. (Recently noted.)

S. C., Orangeburg.—Fair Buildings.—Orangeburg County Fair Association is being organized by J. H. Claffy, W. C. Crum, P. M. Smoak and others; is arranging to erect fair buildings, construct race track, etc.

Tex., Bay City.—Natatorium.—L. H. Williams and W. D. James will erect natatorium; pool 75x100 feet, with depth of 2½x13 feet; cement construction.

Tex., Waco.—Fair Buildings.—Waco Cotton Palace Association rejected all bids for erection of two fair buildings; will have plans changed and receive new bids later. (Recently noted.)

Va., Churchland.—Stables, etc.—T. E. Trotman will rebuild stables, etc.; 40x10 feet; ordinary construction; cost \$3000. (Recently reported burned under Portsmouth, Va.)

Va., Richmond.—Hospital.—William Byrd Hospital will erect hospital building.

W. Va., Wheeling.—Hospital.—Ohio County Anti-Tuberculosis League receives bids, until noon June 22, through Harriet B. Jones, president, to erect four buildings for tuberculosis sanitarium, with water and sewerage systems, cement walks, etc.; plans by F. S. Farls, Wheeling. (Recently noted.)

W. Va., Wheeling.—Hospital.—City Hospital Association will inaugurate campaign to raise funds for erection of fireproof hospital.

W. Va., Wheeling.—Market and Auditorium. Market Auditorium Co. has plans by Fred F. Farls, Wheeling, for market and auditorium building; two stories; fireproof; steel, concrete and terra cotta; market on first floor, equipped with 59 stalls; restaurant at each end; cooling plant in basement; auditorium on second floor; cost about \$150,000. (Company recently reported incorporated by Geo. W. Lutz and others.)

RAILWAY STATIONS

Fla., Deland.—Atlantic Coast Line, M. Riddle, superintendent, Jacksonville, Fla., will erect brick depot; cost \$12,000; bids opened June 15.

Fla., Jacksonville.—Jacksonville Terminal Co. will make improvements to union passenger station, under supervision of J. C. Blanton, including larger waiting-room for white patrons, addition to ticket office and new waiting-room for colored patrons.

Fla., Largo.—Atlantic Coast Line Railway, E. B. Pleasants, chief engineer, Wilmington, N. C., will erect station.

Fla., St. Petersburg.—Atlantic Coast Line Railway, E. B. Pleasants, chief engineer, Wilmington, N. C., will erect proposed passenger station.

Ga., Dublin.—Wrightsville & Tenuille Railroad, A. P. Daley, president, Tenuille, Ga., will erect \$6000 depot, etc.

Ga., Maxton.—Seaboard Air Line Railway, W. L. Seidson, chief engineer, Portsmouth, Va., will erect proposed union passenger depot.

Ga., Moultrie.—Valdosta, Moultrie & Western Railroad Co., Gordon Tillman, chief engineer, Valdosta, Ga., will erect freight warehouse and passenger station.

Ky., Guthrie.—Louisville & Nashville Railroad, W. H. Courtenay, chief engineer, Louisville, Ky., will erect depot to cost \$20,000 to \$25,000.

Mo., St. Louis.—Illinois Traction System, H. E. Chubbuck, vice-president, will construct temporary passenger station prior to erection of permanent structure at High St. and Luens Ave., to be erected next year.

N. C., Rutherfordton.—Seaboard Air Line Railway, E. B. Pleasants, chief engineer, Wilmington, N. C., and Southern Railway, D. W. Lum, chief engineer maintenance of way and structures, Washington, D. C., contemplate erection of union station.

S. C., Mayeville.—Atlantic Coast Line Railway, E. B. Pleasants, chief engineer, Wilmington, N. C., plans to erect station of frame construction.

Tenn., Morristown.—Southern Railway, D. W. Lum, chief engineer maintenance of way and structures, Washington, D. C., released contractor on passenger station under construction and will complete structure under supervision of company's employees; 32x125 feet; covered platform, 34x48 feet; ordinary construction; pressed brick; tile roof; granite sills; electric lights. (Previously noted.)

Tex., Houston.—Galveston-Houston Electric Co., L. C. Bradley, president, will erect terminal station; pressed brick; 160x100 feet. (Recently noted.)

Tex., Wharton.—Southern Pacific Company, A. V. Kellogg, Houston, Tex., is reported to erect \$13,000 depot.

SCHOOLS

Ala., New Decatur.—City will vote on \$20,000 bond issue to erect \$10,000 school and retire previous bond issue. Address The Mayor.

Ark., Humphrey.—Humphrey Special School District issued \$10,000 of bonds to erect school building. Address District Commissioners.

Ark., Little Rock.—School Board has plans by George R. Mann, Little Rock, for proposed high-school annex.

D. C., Washington.—Cuno H. Rudolph, Commissioner District of Columbia, will receive bids until 2 P. M. July 5 to construct addition and alter Armstrong Manual Training School No. 129, on F St., between 1st and 3d Sts., Washington; specifications, etc., may be obtained from chief clerk, Engineer Department, Room 427 District Bldg.

D. C., Washington.—Gonzaga College, Rev. Eugene De L. McDonnell, president, 19 I St. N. W., has plans by Frank G. Pierson, 902 F St. N. W., Washington, for chapel, gymnasium and classroom building; three stories; brick; fireproof; swimming pool for hot and cold water; steam heat; cost about \$150,000. (Recently noted.)

D. C., Washington.—Cuno H. Rudolph, John A. Johnston and William V. Judson, Commissioners D. C., will receive bids until 2 P. M. June 29 to erect eight-room school at 39th and R Sts. S. E.; blank forms, specifications, etc., at office of chief clerk Engineer Department, 427 District Bldg., on deposit of \$10.

Ga., Fort Valley.—L. Carter, secretary Board of Education, may be addressed relative to erection of school on Beauty Square. (Recently noted.)

Ga., Madison.—Eighth District Agricultural School, J. H. Broedlove, principal, will expend \$15,000 to erect girls' dormitory.

Ky., Paducah.—McCracken County School Board will erect schools at Ragland, Lamont and Union Station.

Ky., Russellville.—General Board of Education of Louisville Conference will expend \$25,000 for improvements and enlargements to Logan College. Address president of Logan College.

La., Leesville.—Vernon parish is reported to have voted \$40,000 bond issue to erect school. Address Parish Police Jury.

La., Point Pleasant.—Plaquemine Parish School Board, Pointe a la Hache, La., will erect school.

La., Pontchartroula.—Dominican Fathers in charge of St. Anthony's Catholic Church are reported to have purchased 1300 acres of land and small monastery and to erect seminary.

La., Rayne.—J. D. Hunter, chairman of committee, will receive bids until July 19 to erect school; brick construction; certified check for \$500, payable to Dr. Hunter; plans and specifications at office of Dr. Hunter at Rayne, or of C. G. Honold, architect, Abbeville, La.

La., Ruston.—City will open bids July 1 to erect school; brick; fireproof; 24 classrooms; cost within \$65,000; plans by Mr. Neal of Shreveport, La. (Previously mentioned.)

La., Shreveport.—School Board will erect eight-room brick school in Queensboro Addition, also schools at Jewella, Stoner Hill subdivision, Belcher, Mooringsport, Mira and Myrtistown district.

La., Tallulah.—Madison Parish School Board will receive bids through C. M. Hughes, superintendent, until noon July 13 to erect brick school; certified check for \$1000; plans and specifications at office of Stevens & Nelson, architects, New Orleans, La. (Recently noted.)

La., Tallulah.—Building committee of Tallulah High School rejected bids to erect high school and will advertise for bids to be received until July 13 at office of C. M. Hughes, superintendent. (Noted in May.)

Mo., Baltimore.—St. Mary's Industrial School, Brother Paul, superintendent, Wilkerson and Canton Aves., plans to expend about \$25,000 for improvements to entrance to school.

Miss., Brookhaven.—Whitworth College will probably expend \$40,000 to erect auditorium and two-story dormitory to accommodate 250 pupils; brick or concrete construction; cost \$40,000; L. L. Lampton of Magnolia, Miss.; Rev. J. T. Leggett, Brookhaven, and others, trustees.

Miss., Ellisville.—City contemplates issuance of \$10,000 of bonds to erect school; H. P. Gough, City Clerk.

Mo., Slate Ridge (not a postoffice).—Harford County School Commissioners, Belair, Md., are reported as having plans prepared by Otto G. Simonson, American Bldg., Baltimore, Md., for school; two stories; brick and stone; marble and granite trimmings; electric lights; steam heat.

Miss., Greenwood.—Trustees of Jefferson Davis High School selected R. H. Hunt, Chattanooga, to prepare plans for school; three stories; brick; stone trimmings; composition roof; steam heating; electric and gas lighting; cost \$40,000. (Recently noted.)

Miss., Newton.—Mayor and Board of Aldermen receive bids until 2 P. M. June 29 to erect school and remove old building; certified check for \$500; plans and specifications at office of G. M. Beaver, Mayor, Newton; Contractors' Exchange, New Orleans, La., and of Xavier A. Kramer, architect, Magnolia, Miss.

Miss., Meridian.—City will expend \$38,000 to erect school at Fowell's survey, three negro schools and improvements to present structures. Address The Mayor. (See Contracts Awarded, "Schools.")

Miss., Tutwiler.—City will let contract July 4 to erect school building; 40x60 feet; ordinary construction; stoves; cost \$5000; plans by W. M. Alsop, Houston, Miss.; A. Webster, City Clerk. (Recently noted.)

Miss., Vardaman, P. O. Timberville.—Town is having plans prepared by W. M. Alsop, Houston, Miss., for school building; E. D. Hawkins, Mayor.

Mo., Columbia.—University of Missouri is having plans prepared by Cope & Stewardson, 800 Security Bldg., St. Louis, Mo., for dairy barn and engineering shops; details not determined; cost \$12,000 and \$19,000, respectively; date of opening bids not set. Address J. G. Bahk, secretary. (Recently noted.)

Mo., Slate Ridge (not a postoffice).—Harford County School Commissioners, John D.

Worthington, president, Belair, Md., are having plans prepared by Otto G. Simonson, American Bldg., Baltimore, Md., for school; two stories; brick and stone; 40x60 feet; marble and granite trimmings; electric lights; steam heat; cost \$15,000; bids received until July 1.

Mo., St. Louis.—Board of Education will expend \$23,000 for alterations and addition to school at 3709 Nebraska Ave.

Mo., Webb City.—City will probably issue \$20,000 of bonds to erect high school and complete and furnish Webster school. Address The Mayor. (Recently noted under Mo., Joplin.)

N. C., Raleigh.—Agricultural and Mechanical College is having plans prepared by Henry E. Bonitz, Wilmington, for Young Men's Christian Association building; to contain swimming pool, gymnasium, etc.; cost \$40,000. (Previously noted.)

N. C., West Durham.—Board of Education will open bids July 5 to erect school recently noted; 10 rooms; brick; heating not decided; electric lighting; cost \$15,000. Address C. W. Massey. (See "Machinery Wanted.")

Okla., Blackwell.—Board of Education will open bids and let contracts June 29 to erect high school and Ward school buildings; high school, 140x59 feet; Ward school, 46x54 feet; fireproof construction; fan-blast and gravity system of heat; electric lighting; cement sidewalks; high school to cost \$45,500; Ward school, \$8000; plans by Smith & Parr, Oklahoma City, Okla.; B. W. Jones, clerk. (Recently noted.)

Okla., Sapulpa.—Board of Education will expend \$35,000 to erect high-school building; 80x136 feet; two stories and basement; ordinary construction; direct steam heat; one pipe basement system; plans by Charles A. Popkin, Sapulpa; architect recently noted to receive bids until June 15. (See "Machinery Wanted.")

S. C., Gaffney.—Limestone College is having plans prepared by Wheeler & Stern, Charlotte, N. C., to erect dormitory and dining hall; 50x60 feet; four stories; brick; granite trimmings; steam heating; electric lighting. (See "Machinery Wanted.")

S. C., Newberry.—Newberry College plans to enlarge school.

Tenn., Memphis.—J. M. Acker, Mayor, will receive bids until 5 P. M. July 3 to erect city hall, negro school, heating and plumbing of city hall; certified check for 4 per cent. amount of bid with each proposal; plans and specifications at office of William Drago, architect, 1002 Perrin Bldg., New Orleans, La., or may be had on deposit of \$10.

Tenn., Mt. Pleasant.—Board of Education, J. S. Hill, president, plans to erect addition to Hay-Long school building to cost \$10,000 to \$15,000.

Tenn., Shelbyville.—School Board, E. Shepherd, secretary, will receive bids until July 1 to erect school building; two stories; brick; plans may be seen at office of R. H. Hunt, architect, James Bldg., Chattanooga, Tenn., or Mr. Shepherd. (Recently noted.)

Tex., Alice.—City will soon vote on \$10,000 issue to erect addition to school. Address The Mayor.

Tex., Dallas.—Dallas Free Kindergarten Association has plans by Lang & Witchell, Dallas, for proposed building; gymnasium in basement; cost about \$17,000.

Tex., Itasca.—W. H. Coffman, president of Board of Education, will receive bids until June 23 for dismantling, removing and wrecking of 12-room frame building; bids also received at same time to erect negro school in which any of this material may be used except roof and floors.

Tex., Gunter.—Bids received at office of T. A. Bowen until 5 P. M. June 20 to erect school; brick; eight rooms and auditorium; certified check for \$250; plans and specifications at above office or office of Sparger & Peters, architects, Bonham, Tex.

Tex., Houston.—William M. Rice Institute, Edgar Odell Lovett, president, is having plans prepared by Cram, Goodhue & Ferguson, 170 Fifth Ave., New York, for two proposed dormitories; steam heat; electric lights.

Tex., Jourdanton.—Atascosa county will erect \$20,000 school. Address County Commissioners.

Tex., Petty.—Bids received until noon June 19, addressed to A. M. Collier, president, or A. M. Reese, secretary board of trustees, Petty Independent school district, for erection of school according to plans by Barry & Smith, Paris, Tex.; certified check for \$100; plans and specifications at W. W. Vauter's drug store, Petty.

Tex., San Antonio.—School Board, T. M. Deckman, chairman building committee, will

open bids July 1 to erect school building; 12 rooms and basement; reinforced concrete; steam heat; cost \$40,000; plans by Seutter & Shand, 424 Moore Bldg., San Antonio. Address architects. (Recently noted.)

Tex., Spur.—City will erect proposed school; two stories and basement; brick; 10 classrooms and auditorium, etc. Address The Mayor.

Tex., Waco.—Bids received by J. C. Lattimore, secretary of School Board, until June 25 to erect two-story-and-basement school; brick; plans and specifications at office of Scott, Pearson & Dean, architects, Waco.

Va., Bristol.—School Board has plans by Clarence B. Kearfott, Box 33, Bristol, for addition to Third ward public school; 43x82 feet; ordinary construction; steam-heating plant; fan ventilation; cost \$8000; bids opened June 20.

Va., Richmond.—Richmond College, F. W. Boatwright, president, will award contract in July to erect Woman's College building, several dormitories and other buildings at Westhampton; plans by Cram, Goodhue and Ferguson of Boston and New York; estimated cost \$500,000. (Previously mentioned.)

Va., Richmond.—School Board is having plans prepared by C. M. Robinson and Carneal & Johnson, Richmond, for one colored and two white school buildings; semi-fireproof construction; cost \$75,000, \$75,000 and \$35,000, respectively; bids not advertised.

Va., Salem.—G. R. Ragan, architect, will receive bids until 10 A. M. June 24 to erect four-room school; plans and specifications at his office in Salem.

W. Va., Clendenin.—School Board of Big Sandy district, Kanawha county, will receive bids addressed to J. R. Davis, secretary, Clendenin, to erect brick school; general contractor to submit bid for building complete, with deduction for heating and plumbing; separate bids for heating and plumbing; certified check for \$1000 with First National Bank of Clendenin, and with bids for less than general contract for 5 per cent. amount of bid.

W. Va., Keystone.—Board of Education is having plans prepared by Pedigo & Gary, Bluefield, W. Va., for school; three stories; 80x80 feet; mill construction; fan blast heating system; electric lighting; cement sidewalks; cost \$25,000. (Previously noted.)

W. Va., Romney.—State Board of Control will receive bids until noon July 3 to erect power-house, repair school building, bathrooms and lavatories at West Virginia School for Deaf and Blind; certified check for \$200; plans and specifications at office of Wheeling (W. Va.) Intelligencer; Dispatch News, Parkersburg, W. Va.; State Board of Control, Charleston, W. Va., and School for Deaf and Blind at Romney.

W. Va., Winona.—Bids received until June 19 by Board of Education of Nuttall district, W. S. Greiner, secretary, to erect six-room school; contractor to furnish all materials; separate bids for building and flues and foundation; plans at office of Mr. Greiner.

STORES

Ala., Attalla.—E. D. Pettit will erect store building; cost \$10,000.

Ark., Altheimer.—Louis Altheimer is having plans prepared by Theo. M. Sanders, Little Rock, Ark., for store building; two stories; faced with white enameled brick.

Ala., Birmingham.—James and Joseph Toole will erect store building; three stories.

Ark., Little Rock.—Joseph Pfeiffer Clothing Co. leased three buildings on Main St. between 5th and 6th Sts. and will convert into department store, remodeling both interior and exterior.

Ark., Little Rock.—John M. Moore will erect store building; two stories.

Ark., Little Rock.—George B. Pugh and R. E. Wiley will erect store building.

Ark., Monticello.—F. H. Scott will erect store; concrete construction.

Fla., Jacksonville.—Mills & Whitner will erect business building; one story; brick; 50x50½ feet.

Fla., Jacksonville.—J. C. Cooper will erect building; two stories; frame.

Fla., Jacksonville.—George A. Carroll will erect business building; four stories; 22x140 feet; fireproof construction.

Fla., Jacksonville.—Montgomery Corse will erect store building; five stories; brick and reinforced concrete; 42x90 feet; cost about \$25,000.

Fla., Wauchula.—Bank of Wauchula Building Association will erect bank, store and opera-house building. (See "Bank and Office.")

Fla., West Palm Beach.—Anthony Bros.

will convert Jefferson Hotel into store and office building and erect addition; concrete construction.

Ga., Devereux.—Monte Bros. will erect store to replace structure reported burned. (See "Warehouses.")

Ga., Macon.—Adams Grocery Co. will erect store building; brick and stone; cost \$17,000.

La., Ringgold.—O. G. Thomas Company will erect business building; two stories; 50x100 feet.

La., New Orleans.—Leon Fellman has plans by Emil Weil, New Orleans, for store building; 32x133 feet; five stories; front of white enameled terra-cotta; fireproof; fireproof windows and doors; steam heat; sprinkler system; elevators and iron stairways; cost \$50,000 to \$60,000. (Recently noted.)

Mo., Baltimore.—Baltimore News Co., 313 W. German St., is having plans prepared by Owens & Sisco, Continental Bldg., Baltimore, for store and warehouse at 227 N. Calvert St.; three stories.

Mo., Baltimore.—A. Eisenberg of Eisenberg's Underselling Store, 213-19 W. Lexington St., is having plans prepared by Charles E. Cassell & Son, Law Bldg., Baltimore, to remodel building at 35 W. Lexington St. into store building; four and a half stories; pressed brick with ornamental copper and plate-glass facade.

Mo., Baltimore.—James Keely, 329 Oliver St., has plans by Jacob F. Gerwig, 219 E. Lexington St., Baltimore, for five stores and dwellings on Calverton, Rd. (See "Dwellings.")

Mo., Kansas City.—Muehlebach Estate Co. will erect store; brick; cost \$3500.

Mo., Moberly.—A. C. Gladney contemplates rebuilding structure reported burned; two stories and basement; ordinary construction; heating and lighting plant; plans not determined.

Mo., St. Louis.—Scruggs-Vandervoort-Barney Dry Goods Co. will erect additional building; three stories.

N. C., Albemarle.—R. L. Smith and A. F. Biles will erect business building; two stories; brick; 75x80 feet; ordinary construction; electric lighting; cost \$3000; day labor.

N. C., Albemarle.—T. H. Earne will erect business building.

N. C., Ahoskie.—J. H. Mitchell & Son are reported to erect business building; three stories; lower floor for store; upper floor for hotel.

N. C., Ahoskie.—J. W. Powell and J. T. Parker will erect store and office building; two stories; lower floor for stores; upper floor for offices.

N. C., Ahoskie.—D. P. Baker & Co. and J. A. Copeland will erect two stores with one wall as partition; one story; 22x72 feet; construction begun.

N. C., Charlotte.—Egbert Harty will expend \$25,000 to erect store recently noted; five stories; 50x150 feet; semi-proof construction; steam heat; electric lighting; three-way prism sidewalks; electric freight and passenger elevator; plans by Louis H. Ashbury, Charlotte; bids opened June 21; will install sprinkler system.

N. C., Southport.—H. W. Hood will open bids July 10 to erect store and office building; 30x85 feet; two stories; ordinary brick construction; cost \$5000. (Recently noted.)

Okla., Oklahoma City.—J. W. Gillespie will erect store; three stories; brick; cost \$10,000.

S. C., Charleston.—J. Hepler will erect store building; cost \$3500.

S. C., Greenville.—Hobbs-Henderson Company will erect addition to store; two stories and basement; 27x58 feet; brick construction; basement under annex and present structure to have cement floor and metal ceiling; electric lights; construction begun.

S. C., Charleston.—A. Sotile will erect arcade building; cost \$13,000.

S. C., Pelham.—J. M. Davis & Co. plan to erect store building. (See "Contracts Awarded, Stores.")

Tenn., Centerville.—J. S. Beasley will erect three business buildings.

Tenn., Centerville.—R. B. Barnwell, J. H. Patterson and W. S. Woolard will erect store building.

Tenn., Knoxville.—Baumann Bros. have completed plans to remodel Edington Bldg. on Wall Ave. for Charles E. Hunter.

Tex., Blessing.—John L. Logan will erect business building; brick construction.

Tex., Brownsville.—Dr. G. D. Mahon, Marshall, Tex., will erect business building.

Tex., Coupland.—Coupland Mercantile Co. will erect business building; brick; 32x100 feet.

Tex., Dallas.—J. N. Tholl and S. J. Dickey will erect business building.

Tex., Fort Worth.—William Reynolds will erect business building at 9th and Main Sts.; cost \$33,000.

Tex., Waco.—Will Ward will erect business building; cost \$19,000.

Tex., Fort Worth.—Sam Davidson will expend \$7,000 for improvements to building at Front and Commerce Sts.

Tex., Waco.—W. R. Clifton will receive bids until 3 P. M. June 26 to erect two-story-and-basement brick building to be occupied by Herrick Hardware Co.; plans and specifications at office of Scott, Pearson & Dean, architects, Waco.

Tex., Wharton.—G. A. Harrison will erect business building; three stories; brick; foundation 58x80 feet; cost \$20,000.

Va., Norfolk.—E. C. Horn & Co., New York, are preparing plans for theater, store and office building. (See "Theaters.")

Va., Richmond.—Jacob Levy will erect tenement (two stories); two stories; brick; cost \$10,000.

Va., Richmond.—R. Ferrandini will erect store building; four stories and basement; brick, steel and concrete; cost \$35,000.

Va., Roanoke.—H. C. Elliott of Cassell & Elliott will erect store building; two stories; brick.

W. Va., Job.—Ben Y. White will rebuild burned store; 30x100 feet; mill construction.

THEATERS

Fla., Wauchula.—Bank of Wauchula Building Association will erect bank, store and opera-house building. (See "Bank and Office.")

Md., Baltimore.—Nicola Vito, 2018 E. Monument St., contemplates converting building at 615 N. Duncan Pl. into moving-picture theater.

Tenn., Memphis.—Boyle Bros. are reported to erect theater at 229 S. Main St.; three stories; seating capacity 2000.

Va., Richmond.—Livingston Amusement Co. incorporated with \$25,000 capital stock; J. H. Livingston, president and general manager; Thos. Cousins, secretary and treasurer.

Miss., Gulfport.—George W. Shirley will remodel building for theater.

Mo., St. Louis.—E. H. Pipe Realty Co. will erect theater; 75x135 feet; cost \$30,000.

Tenn., Memphis.—Majestic Amusement Co. leased building at 49 S. Main St. and will remodel for theater; will probably install marble front.

Tenn., Nashville.—Crescent Amusement Co. incorporated with \$40,000 capital stock by Henry Sudekum, Tony Sudekum, W. J. Williams and others.

Tex., Austin.—Endress & Walsh, Austin, prepared plans for proposed theater at Riverside Amusement Park.

Va., Norfolk.—E. C. Horn & Co., New York, are preparing plans for proposed Tazewell Theater; pressed tan brick and terra-cotta; green tile trimming; elliptical plate-glass front, two stories high, within vestibule, with glass and bronze hood extending over sidewalk on line with second story; foyer extending across rear of main auditorium; brass and plush screen suspending from rear of last row of seats; seating capacity 1650; balcony and gallery extending across entire house; fire-escapes; portion of building to be utilized for stores and offices.

WAREHOUSES

Ala., Dadeville.—Dadeville Union Warehouse & Wholesale Grocery Co. incorporated with \$10,000 capital stock by W. D. O'Brien, B. L. Young and E. W. Winslett.

Fla., Jacksonville.—Chas. Blum is having plans prepared by Rutledge Holmes, Jacksonville, for brick and concrete two-story warehouse. (Recently mentioned.)

Fla., Jacksonville.—Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., is not advised definitely as to any terminal improvement; latter lately mentioned. (See "Railway Shops, Terminals, etc.")

Fla., Tampa.—J. Q. Brantley has not set date for opening bids to erect warehouse recently noted; three stories; fireproof; 50x75 feet; electric lighting; cost \$10,000.

Ga., Moultrie.—Valdosta, Moultrie & Western Railroad Co., Gordon Tillman, chief engineer, Valdosta, Ga., will erect freight warehouse. (See "Railway Stations.")

Ga., Augusta.—George R. Lombard is having plans prepared by G. Lloyd Preacher, Augusta, for three warehouses; 50x220x14 feet;

wood floors; truss roof; cost \$5000 each; will soon open bids. (Recently noted.)

Ga., Devereux.—Moate Bros. will erect three warehouses and store to replace structures reported burned; loss \$10,000.

Md., Baltimore.—Baltimore News Co., 318 W. Baltimore St., is having plans prepared by Owens & Sisco, Continental Bldg., Baltimore, for warehouse and store building at 227 N. Calvert St.; three stories.

N. C., High Point.—Standard Oil Co., 26 Broadway, New York, will erect warehouse.

N. C., Winston-Salem.—W. H. Turner will erect warehouse; sheet-iron construction.

Tenn., Knoxville.—Hackney, Broyles & Lackey Co. will erect structure to replace burned feed department; brick construction. (Recently reported burned.)

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Ala., Ensley.—General Realty Co. awarded contract to erect apartment-house; cost \$100,000.

Ala., Mobile.—Waring estate awarded contract to S. A. Dupree & Son, Mobile, to erect store and apartment-house. (See "Stores.")

Ga., Augusta.—W. F. Cavanaugh, 1315 Reynolds St., awarded contract to H. C. Morrison, corner Reynolds and 9th Sts., Augusta, to erect apartment-house; 40x80 feet; gas and electric lighting; concrete sidewalks; cost \$5500; plans by L. A. Belony, care of Irish American Bank, Augusta.

Mo., St. Louis.—American Real Estate, Building & Investment Co. awarded contract to erect buildings to contain five stores on ground floor and apartments above; brick construction.

N. C., Charlotte.—T. C. Mooney awarded contract to J. O. Campbell to erect apartment-house; 27 rooms; unit brick construction; plans by J. M. McMichael, Charlotte.

Okla., Muskogee.—E. C. Moreton awarded contract to Hardin Bros., Muskogee, to erect apartment-house; brick; Carthage stone trimmings; 10 three and four-room apartments.

Tex., Houston.—J. M. Schumacher awarded contract to Carl Curtis, Magnolia Park, Houston, to erect three apartments; two stories; cost \$16,000.

Tex., Houston.—H. J. Bering, 305 Temple Bldg., awarded contract to R. C. Rutherford to erect apartment-house; 42x56 feet; frame; tin roof; gas heating; electric lighting; plans by owner.

ASSOCIATION AND FRATERNAL

Ky., Middlesboro.—C. D. Ball (owner) awarded contract to Joe Heid, Middlesboro, to erect building for Order of Owls; 76x25 feet; brick; fireproof construction; electric lighting; plans by Baumann Bros., Knoxville, Tenn. (Recently mentioned.)

Ky., Paducah.—Mt. Zion Lodge, Free and Accepted Masons, will expend \$9800 to erect lodge building; three stories; 58x69 feet; ordinary brick construction; electric lighting; plans by A. L. Lassiter, Paducah; contract recently noted awarded to Jack Cole, Paducah.

N. C., Wilmington.—Wilmington Lodge, No. 532, Benevolent Order of Elks, awarded contract to Joseph Schad, Wilmington, to erect addition to structure lately noted; 35x59 feet; mill construction; steam heating; hand-power elevator; dumbwaiter; plans by J. F. Seltner; cost about \$12,000. (See "Machinery Wanted.")

Okla., Sallisaw.—Ancient Free and Accepted Masons and Independent Order of Odd Fellows awarded contract at \$9750 to Blevins & Leigh, Van Buren, Ark., to erect joint lodge building (exclusive of plumbing and wiring); three stories; brick; 40x100 feet.

Va., Roanoke.—Lakeland Lodge, No. 190, Ancient Free and Accepted Masons, awarded contract at \$57,400 to Herringdon & Normoyle, Roanoke, to erect Masonic temple; four stories; fireproof construction; plans by Huggins & Bates, Roanoke. (Previously noted.)

W. Va., Clarksburg.—Ancient Free and Accepted Masons will expend \$80,000 to erect Masonic Temple; 47x155 feet; five stories and basement; ordinary construction; steam heat; electric lighting; cement sidewalks; passenger elevator; plans by E. E. Pruitt, Columbus, O.; contract recently noted awarded to C. P. Howell, Clarksburg.

BANK AND OFFICE

D. C., Washington.—D. C. Phillips, 1609 21st St. N. W., awarded contract to W. P. Lipscomb, 1405 F St. N. W., Washington, to erect two-story office building at 1218 Connecticut Ave. N. W.; brick construction;

Tex., Harrisburg.—Magnolia Warehouse & Storage Co. improvements will give capacity of 20,000 bales uncompressed cotton in new warehouse, or about 40,000 compressed, thus affording plant facility to handle and store 70,000 to 75,000 bales; press capacity about 1200 bales per 10-hour day; reinforced concrete, brick, fireproof structure; automatic sprinklers; electric lighting; cost \$160,000; Pearson & Co., Houston, Tex., architects and contractors. (Contract recently noted awarded by Weld & Neville, owners, 81 Beaver St., New York.)

Tex., Temple.—R. L. Barclay accepted plans for warehouse; four stories; reinforced concrete; 116x150 feet.

Va., Suffolk.—Martin & Son, Petersburg, Va., will erect warehouse.

cost \$24,000; plans by A. P. Clark, Jr., 816 14th St. N. W., Washington.

N. C., Monroe.—Ingram & Brasington have contract to remodel Shute Bldg. for bank; cost \$5000.

Tex., Deport.—First National Bank awarded contract to Campbell & Owen, Paris, Tex., to erect bank and store building; one story; 64x67½ feet; brick and mill construction; stoves; gasoline lighting; cost \$8000; plans by Barry & Smith, Paris. (Recently noted.)

Tex., Paris.—C. F. & T. J. Broad awarded contract to J. L. Stockey, Paris, to erect office and store building. (See "Stores.")

CHURCHES

S. C., Greenville.—First Presbyterian Church awarded contract to W. M. Jordan to erect addition to and remodel edifice; 26x100 feet; cost \$20,000; plans by F. H. & J. G. Cunningham, Greenville. (Previously mentioned.)

S. C., Greenville.—First Presbyterian Church, T. W. Sloan, pastor, awarded contract at \$16,500 for alterations and improvements to edifice, including removal of rear wall to corner of lot for enlargement of main auditorium, 26½ feet; remodeling spire and construction of smaller spire at opposite corner, remodeling interior, etc. (Previously noted.)

Tex., Portland.—Bay View College awarded contract to erect chapel. (See "Schools.")

Va., Warrenton.—St. James Episcopal Church awarded contract to William Handback to erect edifice; 80x40 feet; hot-air heat; electric lighting; cost \$25,000; plans by E. C. Dunn, Alexandria, Va. (Recently noted.)

CITY AND COUNTY

Ala., Union Springs.—City awarded contract to C. C. Clarke to erect proposed Carnegie Library. (Recently noted.)

Ark., Benton.—Jail.—Saline county awarded contract at \$13,000 to A. V. Martin Construction Co. of Benton to erect jail, and at \$3485 to Pauly Jail Building Co. of St. Louis, Mo., for steel work; two stories; red brick; electric lights; water-works; steam heat; tile roof; no woodwork used in construction. (Previously noted.)

Fla., St. Petersburg.—Fire Station.—City awarded contract to Jesse R. Sykes, St. Petersburg, to erect fire station; brick; W. F. Devine, City Clerk. (Recently noted.)

Ky., Paducah.—Pesthouse.—City awarded contract to Jack Cole, Box 394, Paducah, to erect pesthouse; cost \$3500; may consider water and light plant for building later. Address The Mayor.

Ky., Middlesboro.—City Hall, etc.—City awarded contract to L. A. Galyon, Knoxville, Tenn., to erect city building, courthouse, fire department and jail; 127x140 feet; two stories; hot-water heat; electric lights; cement sidewalks; jail fireproof; cost \$46,000; plans by Baumann Bros., Knoxville, Tenn. (Lately noted.)

Mo., Kansas City.—Hospital.—City awarded contract to Flanagan Bros., Kansas City, to erect isolating hospital for contagious diseases; group of three buildings; cost \$25,000; plans by F. C. Gunn, Kansas City; contract for heating awarded to M. C. Mahm Company, Kansas City. (Recently noted.)

Tex., San Antonio.—Jail.—Bexar county awarded contract at \$25,331 to Young-Byrne-Lilly Company of San Antonio for construction work, and at \$22,638 to Stewart Iron Works, Cincinnati, O., for steel work; for rebuilding and remodeling county jail; plans by Harry T. Phelps, San Antonio. (Recently noted.)

COURTHOUSES

Ky., Middlesboro.—City awarded contract to L. A. Galyon, Knoxville, Tenn., to erect

courthouse, jail and fire-department building; lately noted. (See "City and County.")

DWELLINGS

Ala., Corey, R. F. D. from Ensley.—J. C. Lusk, Birmingham, awarded contract to Realty Construction Co., Birmingham, to erect dwelling; two stories; seven rooms; cost \$4000; plans by William Warren.

Ark., Little Rock.—J. L. Lipscomb awarded contract to J. W. Calk, Little Rock, to erect residence; cost \$5500; plans by Charles L. Thompson, Little Rock.

D. C., Washington.—G. W. Norris, Y. M. C. A. Bldg., awarded contract to R. G. Hazell to repair dwelling at 827 9th St. N. W.; cost \$3000; plans by A. B. Mullett & Co., Union Trust Bldg., Washington.

D. C., Washington.—J. E. Fowler awarded contract to Blakeney & Borrett to erect two dwellings at 6214-16 9th St. N. W.; two stories; brick; cost \$6000; plans by V. A. Hubbard, 1315 H St. N. W., Washington.

Fla., Tampa.—W. R. Fuller awarded contract to Aulick & Miller, Box 95, Tampa (lately mentioned as lowest bidder) for erection of dwelling; 28x45 feet; two stories; brick and tile roof; cost \$4500; plans by Bonfoey & Elliott, Tampa.

D. C., Washington.—Margaret Shugrue, Conduit Rd. N. W., awarded contract to Oayne & McMullen to erect dwelling on Conduit Rd. near New Cut Rd. N. W.; two stories; frame; cost \$4500; plans by G. W. O'Brien, Washington.

D. C., Washington.—Sarah Carroll awarded contract to E. De Lacy, 18 Benton Pl. N. W., Washington, to erect store and dwelling at 3204 Georgia Ave. N. W.; two stories; brick; cost \$4000; plans by A. H. Beer, 1342 New York Ave. N. W., Washington.

Fla., Tampa.—C. S. Elliot awarded contract through Jay & Lerner, architects, Tampa, to Stubbs & Co., Tampa, to erect bungalow.

Md., Baltimore.—Provident Realty Corporation, Garrison and Piedmont Aves., is having plans prepared by Henry J. Tinley, 314 N. Charles St., Baltimore, for residence on Rosslyn Ave.; two and a half stories; frame; 30x31 feet; S. A. Thompson, owner; construction by Provident Realty Corporation.

Md., Baltimore.—Frank H. Wyatt, east side of Allendale Ave., awarded contract to Murray-Haynes Company, Baltimore, to erect bungalow on Chelsea Ave.; 30x47 feet; slate roof; steam heat; cost \$3000 to \$3500.

Mo., St. Louis.—William R. Compton awarded contract to Faris & Gray, St. Louis, to erect residence; three stories; 75x62 feet; cost \$21,000; plans by Fred G. Bonsack, St. Louis.

N. C., Charlotte.—A. B. Saunders awarded contract to S. Oates, Charlotte, to erect residence; cost \$8000.

N. C., Greenville.—Episcopal congregation awarded contract to erect rectory; two stories; colonial style; cost about \$2500. Address The Rector, Episcopal Church.

S. C., Maysville.—E. G. Spencer has plans by and awarded contract to C. F. Schwerin, Sumter, S. C., to erect dwelling; five rooms, bath, pantry, butler's pantry and kitchen; mill construction; grates, cement sidewalks; cost \$2500. (Recently noted.)

Tenn., Chattanooga.—Ernest S. Rosenheim, 101 Vine St., awarded contract to W. Canfield, Hill City, Tenn., to erect proposed dwelling; two stories; six rooms; hard-pine interior finish; gas and electric lighting; cost \$3500.

Tenn., Knoxville.—N. L. Carrier has plans by W. H. Gildard, Knoxville, for residence; eight rooms; cost \$3000; awarded contract to Toms & Harth, Knoxville.

Tenn., Memphis.—S. R. Waters awarded contract to L. Vance, Memphis, to erect seven dwellings; frame and brick; eight rooms; cost \$31,500, exclusive of heating, wiring and plumbing.

Tex., Dallas.—Mr. Salinas awarded contract to L. B. Perry, Dallas, to erect residence.

Tex., Houston.—Mr. Makeman awarded contract to L. B. Perry, Houston, to erect residence.

Tex., Houston.—Mr. Anis awarded contract to L. B. Perry, Houston, to erect residence.

Tex., Houston.—Mr. Edwards awarded contract to L. B. Perry, Houston, to erect residence.

Va., Norfolk.—H. C. Wilson awarded contract to C. M. Casperson, Norfolk, to erect residence; brick; cost \$4000.

Va., Norfolk.—Russell Holt awarded contract to C. M. Casperson, Norfolk, to erect residence; brick and shingle; cost \$5000.

Va., Norfolk.—G. A. Valden awarded contract to B. L. Nichols, Norfolk, to erect residence; two stories; frame; 20 feet 6 inches by 60 feet; mill construction; hot-air heat; gas and electric lighting; cost \$3300.

Va., Norfolk.—Mrs. E. A. Denby awarded contract to T. A. Nuckols, Norfolk, to erect residence; two stories; brick and frame; cost \$4600.

Va., Norfolk.—Mrs. K. E. Santos awarded contract to R. B. Darden, Norfolk, to erect residence; two stories; frame; cost \$4125.

W. Va., Elm Grove.—William Chambers awarded contract to Finnegan & Amos to erect residence; two stories; frame; eight rooms.

W. Va., Wheeling.—Mrs. Caroline Linton awarded contract to Walters & Simms, Elm Grove, W. Va., to erect residence; cost \$5000.

GOVERNMENT AND STATE

Ark., Stuttgart.—Postoffice.—W. M. Price awarded contract to E. Haynes to erect postoffice, lately noted; 50x70 feet; fireproof; electric lighting; cost \$7000.

Tenn., Dyersburg.—Postoffice.—Treasury Department, James Knox Taylor, supervising architect, Washington, D. C., awarded contract to Rogers & Kaiser, Chicago, Ill., to erect postoffice building; cost, including furnishings, \$50,000.

HOTELS

Ark., Pine Bluff.—Pine Bluff Hotel Co. awarded contract to Seiden-Breck Construction Co., St. Louis, Mo., and Chicago, Ill., to erect hotel; six stories and basement; frontage 154 feet; cost about \$300,000; plans by George R. Mann, Little Rock, Ark. (Recently noted.)

Okl., Bartlesville.—Bartlesville Hotel Co. awarded contract to Oklahoma City Construction Co., Oklahoma City, Okla., to erect hotel; five stories and basement; 140x96 feet; fireproof construction; heating and plumbing to cost \$20,000; 20-foot cement sidewalks; one passenger and one freight elevator; cost \$110,000; plans by Walter Everman, Bartlesville. (Previously noted.)

S. C., Chester.—T. L. Eberhardt awarded contract to J. C. Carpenter and J. W. Wylie of Chester for brick and wood work on annex to Carolina Inn; roofing, plumbing and other contracts to be awarded later; two stories; plans by Shand & Lafaye, Columbia, S. C. (Previously noted.)

Tenn., Union City.—J. C. Reynolds has plans by and awarded contract to W. Shadlin, Fulton, Ky., to erect addition to hotel; 10 rooms with baths; fireproof construction; steam heat; cost \$7000. (Recently noted.)

Va., Lynchburg.—W. W. Lynn awarded contract to W. B. Snead & Co. to erect addition to and improve Hotel Carroll; addition to contain 19 rooms with private baths equipped with tile floors and wainscoting; interior improvements to include in part marble wainscoting, plastered beam ceilings, orchestra balcony over private dining-room, etc.; plans by McLaughlin & Johnson, Lynchburg. (Previously noted.)

Va., Richmond.—A. D. Atkinson awarded contract to E. W. Montes & Co., 115 Broadway, New York, to erect hotel; 93x116 feet; fireproof construction; electric elevator; cost \$325,000; plans by John Kevan Peebles, Norfolk, Va.; will install refrigerating plant, etc. Address S. T. Atkinson, Hotel Richmond. (See "Machinery Wanted.")

MISCELLANEOUS

Ala., Talladega.—Grandstands, etc.—Talladega Baseball Park Co. awarded contract to S. N. Chenault and S. A. Austin, both of Talladega, for improvements to baseball park, including rebuilding of fence, grading and sodding grounds, diamond and outfield, construction of grandstand, bleachers, clubhouse and refreshment stand.

Ark., Stuttgart.—Postoffice.—W. M. Price awarded contract to E. Haynes to erect postoffice building, lately noted. (See "Government and State.")

Tenn., Tullahoma.—Gymnasium.—Steagall & Son of Tullahoma have contract to erect gymnasium for Fitzgerald-Clarke Bldg.; concrete basement, equipped with swimming pool, shower baths, bowling alley, etc.; steam heat; electric lights.

Tex., San Antonio.—Clubhouse.—Travis Club awarded contract to Gordon-Jones Construction Co., San Antonio, to erect clubhouse; site 112 feet 8 inches by 84 feet; seven stories; reinforced concrete; brick facing; swimming pool in basement; first floor, offices, lounging room, reception halls and parlors; second floor, billiard-room and library; third and fourth floors, gymnasium; fifth and sixth floors, sleeping-rooms, 34 apartments; seventh floor, dining-room, kitchen

and roof garden; subcontracts include interior painting and plastering, cornices, marble and tiling floors, heating, plumbing, wiring and hardwood floors; plans by Harvey L. Page & Co., San Antonio; excavation will begin not later than July 1. (Recently noted.)

Va., Rustburg.—Fair Hall.—Building committee awarded contract to John W. Rosser, Rustburg, to erect proposed school fair hall; cost \$2940; plans by Heard & Cardwell, Lynchburg, Va.

SCHOOLS

Ark., Fort Smith.—St. Boniface congregation awarded contract to Jake Truschel, Fort Smith, to erect proposed school; fireproof; brick; stone trimmings; eight rooms; cost \$15,000; plans by Ed A. Strong, Fort Smith.

Ark., Little Rock.—School Board awarded contract at \$19,690 to J. D. Johnson, Little Rock, to erect school at 7th and Johnson Sts.; fireproof construction.

Fla., Brooksville.—City will expend \$7000 to erect school addition; 35x80 feet; ordinary construction; electric lighting; plans and construction by R. D. Bracey, Brooksville. (Recently noted.)

Ga., Dalton.—City awarded contract to Bi-ana Young Company, Sweetwater, Tenn., to erect proposed Fort Hill school building; cost \$12,700.

La., Grayson.—Parish School Board awarded contract to E. B. Humphries, Columbia, La., to erect proposed school; two stories; four recitation-rooms; cost about \$2000; school board to furnish materials.

La., Roseland.—City awarded contract to W. E. Palmer to erect addition to high-school building.

Miss., Courtland.—Panola County Agricultural High School Board awarded contract to J. E. Bridger, Sardis, Miss., to erect high school; main building two stories; seven rooms; will erect one dormitory at present and another later.

Miss., Courtland.—J. E. Johnson, president Board of Trustees, awarded contract to J. E. Bridges, Sardis, Miss., to erect school building; two stories and basement; brick; cost \$3500; plans by R. H. Hunt, James Bldg., Chattanooga. (Recently noted.)

Miss., Meridian.—City awarded contract at \$29,000 and \$23,000, respectively, to C. H. Dobbs, Meridian, to erect manual training school and primary school; will expend \$38,000 additional to erect school at Fewell's survey, three negro schools and improvements to present structures. (Previously noted.)

N. C., Winston-Salem.—School Board awarded contract to Ange Construction Co., Winston-Salem, to erect primary school in West End; eight rooms; brick; plans by W. C. Northrup, Winston-Salem. (Recently noted.)

Okl., Beggs.—Beggs School Board, J. Ray Brown, clerk, awarded contract to E. W. King, Okmulgee, Okla., to erect school building recently noted; 40x70 feet; mill construction; gas lighting; cost \$7000; plans by W. S. Moore, 927 Muskogee St., Okmulgee, Okla.; recently noted to receive bids until June 10. (See "Machinery Wanted.")

Tenn., Benton.—Polk County School Board awarded contract to Bennie Young, Sweetwater, Tenn., to erect schools at Benton and Ducktown, Tenn.; cost \$15,000 each; two stories; brick; steam heat; plans by R. F. Graf & Son, Knoxville, Tenn.

Tenn., Ducktown.—Polk County School Board awarded contract to Bennie Young, Sweetwater, Tenn., to erect schools at Benton and Ducktown. (See Tenn., Benton.)

Tenn., Knoxville.—City awarded contract to S. M. Beaumont, Knoxville, Tenn., to erect proposed school to cost \$40,000.

Tenn., Lawrenceburg.—Sacred Heart congregation awarded contract to H. A. Brink & Co., Lawrenceburg, to erect school; 78x42 feet; mill construction; steam heat; electric lighting; cost \$6000; plans by Rev. John A. Nolan, Clarksville, Tenn. (Recently noted.)

Tex., Donna.—School trustees awarded contract to H. L. Fitch, Brownsville, Texas, to erect school; 13x250 feet; ordinary faced-brick construction; acetylene-gas plant; cost \$14,000; recently noted. (See "Machinery Wanted.")

Tex., Portland.—Bay View College, T. M. Clark, president, awarded contract to erect chapel; two stories; reinforced concrete.

Tex., Trinity.—City awarded contract at \$11,425.30 to Herman & Crawford, Trinity, to erect proposed school; two stories; brick; eight rooms.

Tex., Westhoff.—City awarded contract to F. R. Perkins, Westhoff, to erect school;

brick; cost about \$6000. (Previously noted.)

Va., Portsmouth.—School Board awarded contract at \$18,018 to M. L. Parker, Portsmouth, to erect Park View School, and at \$2250 to American Heating & Ventilating Co. of Richmond, Va., for heating, ventilating and sanitation; above contractors recently noted as lowest bidders. (See "Machinery Wanted.")

STORES

Ala., Birmingham.—Henry Treppe awarded contract to J. H. Whitlow, Birmingham, to erect business building; two stories; brick; cost \$5000.

Ala., Birmingham.—Drennen Company will expend \$25,000 to erect store building; 50x100 feet; ordinary construction; plans by Miller & Martin, Birmingham; contract recently noted awarded to P. E. Bostick, 505 First National Bank Bldg., Birmingham; material purchased.

Ala., Birmingham.—R. D. Burnett awarded contract to Joy Construction Co., Birmingham, to erect store; cost about \$20,000. (Previously noted.)

Ala., Fayette.—Frank Nuckles awarded contract to R. M. Secord to erect business building; two stories; concrete.

Ala., Leeds.—Whitmore & Sons awarded contract to Will Stone, Leeds, to erect store building; brick; frontage 100 feet.

Ala., Mobile.—Waring estate awarded contract to S. E. Dupree & Son, Mobile, to erect business building; two stories; plate-glass front; lower floor for stores; upper floor for apartments; plans by Hutchisson & Chester, Mobile.

Ark., Conway.—J. H. Harrod awarded contract to F. U. Halter to erect store; plate-glass and marble front; plans by Theo. M. Sanders, Little Rock, Ark.

Ark., Little Rock.—Thalman & Reed have contract for improvements to Dodge Meade building; cost \$5000.

Ark., Little Rock.—George W. Donaghey awarded contract to T. T. Reddick, Fort Smith, Ark., to erect five business buildings; two stories; brick; cost \$125,000; plans by Charles L. Thompson, Little Rock. (Previously noted.)

D. C., Washington.—T. Domenick awarded contract to M. J. Gumenick to erect store building at 431 1st St. S. W.; two stories; brick; cost \$3500; plans by S. R. Turner, 635 M St. N. W., Washington.

D. C., Washington.—Sarah Carroll awarded contract to E. De Lacy, 18 Seaton Pl. N. W., Washington, to erect store and dwelling. (See "Dwellings.")

Ga., Macon.—Adams Grocery Co. awarded contract to B. W. James, Macon, to erect store; 100x203 feet; two stories; mill construction; cost \$21,000; plans by P. E. Dennis, Macon. (Lately noted.)

Ga., Savannah.—M. Wilensky has plans by and awarded contract to W. O. Hawley, Savannah, to remodel theater into stores; 60x90 feet; ordinary construction; metal ceilings, tile floors and plate-glass fronts. (Recently noted.)

Md., Baltimore.—J. A. Kerney, Central Ave. and Gay St., awarded contract to Wm. H. Porter & Sons, 505-7 Forrest St., Baltimore, to erect business building; two stories; cost about \$8000.

Md., Baltimore.—Shirley & Son, 408 Union Trust Bldg., awarded contract to Wm. H.

Porter & Sons, 505-7 Forrest St., Baltimore, for improvements and additions to building at Howard and Garrett Sts. (See "Warehouses.")

Md., Baltimore.—James J. Lacy, 2032 E. Baltimore St., awarded contract to J. Henry Smith, 1426 Light St., Baltimore, to erect store and warehouse on Greenmount Ave. near 21st St.; three stories; brick and stone; 72x39 feet; plans by Frederick Thomas, 2935 E. Baltimore St., Baltimore.

Md., Baltimore.—Dr. Charles S. Grindall, Franklin St. near Charles St., awarded contract to Edward Watters & Co., 532 St. Paul St., Baltimore, to erect building at Charles and Franklin Sts.; 38x69 feet; ordinary construction; steam heating; electric lighting; cost \$13,000; plans by Baldwin & Pennington, Professional Bldg.

Mo., St. Louis.—American Real Estate, Building & Investment Co. awarded contract to erect store and apartment buildings. (See "Apartment-houses.")

Mo., Grafton.—George La Fivire awarded contract to J. J. Wueller & Son to erect business building; cost \$7000.

S. C., Pelham.—J. M. Davis & Co. awarded contract to remodel store; also plan to erect additional building.

Tex., Abilene.—George L. Paxton awarded contract to R. C. Lewis & Co., Abilene, to remodel business building; cost \$3000. (Recently noted.)

Tex., Beaumont.—B. Deutser awarded contract to W. C. Whitney, Beaumont, to erect business building; two stories; 100x106 feet; cost \$40,000.

Tex., Paris.—C. F. & T. J. Broad will expend \$6000 to erect store and office building; two stories; 25x90 feet; ordinary construction; plans by Barry & Smith, Paris; J. L. Stockey, Paris, recently noted having contract.

THEATERS

Miss., Vicksburg.—Herman Fitchburg, New Orleans, La., awarded contract to H. H. Havis, Vicksburg, to erect moving-picture theater; 30x142½ feet; concrete to ground level with brick above; concrete and cement stucco trimmings; colonial style; lobby 15x30 feet, lined with English veined white Italian marble; ceiling paneled with plaster moldings and relief work; fire-escapes, etc.; cost about \$30,000.

WAREHOUSES

Ala., Mobile.—Mobile & Ohio Railroad, R. A. Wood, chief engineer, Mobile, awarded contract to E. J. Rauboleo to construct brick warehouse; cost \$5000. (Lately noted.)

Md., Baltimore.—Shirley & Son, 408 Union Trust Bldg., awarded contract to Wm. H. Porter & Sons, 505-7 Forrest St., Baltimore, for alterations and additions to building at Howard and Garrett Sts.; four stories; white pressed brick front; cost about \$10,000; lower floor for drug store.

Md., Baltimore.—James J. Lacy, 2032 E. Baltimore St., awarded contract to J. Henry Smith, 1426 Light St., Baltimore, to erect store and warehouse on Greenmount Ave. near 21st St. (See "Stores.")

Tenn., Chattanooga.—Mountain City Milling Co., King and 11th Sts., awarded contract to Adams & Schneider, James Bldg., Chattanooga, to erect warehouse; brick construction; two stories; composition roof; electric lighting; cost \$4000.

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Birmingham.—One of those interested says that the Birmingham & Vicksburg Railroad Co. plans to build 264 miles of line from Birmingham via Tuscaloosa, Ala., Shuqualak and Canton, Miss., to Vicksburg, Miss., through country which is mostly slightly rolling. Incorporators and directors, H. H. Stadeler and L. J. Stadeler, 22 Fifth Ave., Chicago, Ill.; John Wohner, D. Levy, W. L. Dinkins, P. Trollo, A. Tuteur, Isidor Gross and Emile Levy of Canton, Miss., and B. L. Roberts of Sandusky, O. Messrs. Gross, Wohner and Levy are respectively vice-president, treasurer and secretary. S. R. Ballard is chief engineer.

Ala., Montgomery.—The Montgomery & Chattanooga Railroad Co. it is reported, has obtained right of way for its entire proposed line from Montgomery to Alexander City, Ala., 56 miles, and will probably ask bids for construction within a month. Matthew Stokes is said to be promoting the plan. Benjamin Russell of Alexander City is president; J. C. Haas, vice-president, and W. T. Robertson, secretary and treasurer, both at Montgomery, Ala.

Ark., Helena.—An officer of the Missouri & North Arkansas Railroad says the company expects to build with its own force half a mile of main track to a proposed new depot, 1½ miles of siding, together with an incline to the Mississippi River. F. J. Allen, Eureka Springs, Ark., is chief engineer.

Ark., Malvern.—Concerning the report that it would build a railroad, the Moline Timber Co. says that the Rock Island Railroad Co. will do the work.

Ark., McCrory.—A letter says it is reported that the McCrory & Beedeville Southern Railway Co. will issue \$50,000 of construction bonds. Clayton Halley is president, and R. B. Keating, secretary-treasurer.

Fla., Daytona.—J. L. Wallace is reported to have a letter from Robert L. Parks, Springfield, Mass., indicating that he expects to close deal with Eastern parties to build the contemplated railway from Daytona to De Land, Fla., about 20 miles.

Fla., Jacksonville.—An official of the Seaboard Air Line says that nothing has been definitely decided yet about the construction of terminal improvements on the river front at Jacksonville.

more,
ilding
Ware-32 E.
Henry
erect
Ave.
and
derick
ore.ndall,
I con-
Paul
Charles
y con-
tting,
ington,
State,
tract
(Seearded
erectarded
erectarded
erectcon-
erect
feet;il ex-
ding;
struc-
J. L.
con-burg,
to H.
g-pic-
e to
and
style;
elmed
with
fre-d, R.
arded
brickUnion
H. E.
more,
ing at
white
lower32 E.
Henry
erect
Ave.Mill-
tract
atta-
true-
etriesouri
com-
new
an
llen,that
umber
Co.orted
Rail-
ation
and R.orted
arks,
ects
build
a toSea-
been
ction
front

Fla., Williston.—Plans are reported contemplated to build a railroad from Williston via Irvine, McIntosh, Citra and Orange Springs to Palatka, Fla., about 50 miles. A. L. Glass of Gainesville, Fla., and A. De Sola Mendes of Savannah, Ga., who are, respectively, general manager and first vice-president of the Tampa & Jacksonville Railway, are reported promoting the matter in association with C. C. Tracey of Morristown, Fla.

Ga., Adel.—The Georgia & Florida Railway, according to a dispatch, has completed its line to Adel.

Ga., Elberton.—The Elberton & Eastern Railway Co. has been chartered to build a line 50 miles long from Elberton to Washington and Lincolnton, Ga.; capital \$500,000; incorporators, W. O. Jones, W. F. Anderson, J. H. Blackwell, L. M. Heard, R. L. Cauthen and Z. B. Rogers of Elberton; W. J. Adams, J. J. Wilkinson and J. A. Moss of Tignall, and M. A. Pharr of Washington, Ga.

Ga., Halcyon Dale.—Reported that a company has been organized to build a railroad from Millen to Newington, Ga., about 30 miles. The directors are E. S. Lane of Blitch, Ga., president; I. H. Evans, vice-president; W. M. Blitch, chairman of the board, both of Halcyon Dale; A. S. Anderson, secretary and treasurer; R. G. Daniel, H. W. Parker, W. M. Parker, D. S. Blackburn, H. C. Evans, H. S. McCall, J. T. Walker, G. S. Roach, W. H. Marsh, J. T. Lane and C. W. Parker.

Ga., Macon.—An official confirms report that the Macon, Dublin & Savannah Railroad will build two miles from Macon to a connection with the old line, including a steel draw span bridge with 500-foot opening. W. Z. Williams & Co. are the contractors. J. T. Wright is general manager and D. B. Dunn is chief engineer.

Ga., Madison.—A dispatch says that W. D. Brannan, Forest Greene, and others have applied for charter for the Greene County Railroad Co., capital stock \$100,000, to build a line connecting Sparta, White Plains, Greensboro, Monroe, Good Hope, Bostwick and Apalachee, Ga.

Ga., Thomasville.—Concerning the report that T. B. Upchurch of Raiford, N. C., and J. C. Upchurch of Florida might build a railroad from Thomasville, Ga., to Tallahassee, Fla., about 35 miles, it is understood that they have bought a large tract of timber land between those points and are being urged to build a line sufficiently substantial for development into a common carrier.

Ga., Wrightsville.—At a directors' meeting of the Wrightsville & Tenuille Railroad, says a dispatch, it was announced that about \$50,000 are being spent for reducing grades and other improvements to the roadbed and track. A. F. Daly of Wrightsville, Ga., is president.

Ky., Paris.—A list of contractors on the Louisville & Nashville's second track construction from Paris to Covington, Ky., is published thus: Boxley Bros. of Quincy, Ky.; Patterson & Griffen of Pittsburg, Pa.; Hough & Spradlin Company of Knoxville, Tenn.; Callahan Construction Co. of Knoxville; J. H. Filek Construction Co. of Chicago; Robert Grace Contracting Co. of Cleveland, O.; and the Price Construction Co. of Memphis, Tenn. All except the last include some concrete work. W. J. Courtenay, Louisville, Ky., is chief engineer for the railroad.

La., New Orleans.—The Illinois Central Railroad, says a report, contemplates further improvement to the Poydras terminals. A. S. Baldwin is chief engineer at Chicago, Ill.

La., New Orleans.—The Louisville & Nashville Railroad, it is reported, will reconstruct and strengthen its permanent way between New Orleans and Mobile to make it safer from coast storms. W. H. Courtenay is chief engineer at Louisville, Ky.

Miss., Hattiesburg.—W. S. F. Tatum, says a report, denies that he will purchase or has purchased site for terminal for the Bonhomie & Southwestern Railroad.

Miss., Tishomingo.—The North Mississippi Traction Co. is reported to have begun construction of a spur from Tishomingo to the Bear Creek quarry. J. C. Williams having the contract.

Mo., New Madrid.—C. M. Barnes, Marston, Mo., says that tracklaying on the St. Louis & Missouri Southern Railroad from Marston to New Madrid has begun with 60-pound new rails, and eight miles will be in operation by July 10. Line will be extended north to Thebes Bridge and probably south to Little Rock, Ark.

N. C., Salisbury.—R. P. Henry of Winston-Salem, N. C., is reported to have begun survey for the railroad proposed from Salisbury to Monroe, N. C., by N. B. McCannless and others of Salisbury.

N. C., Washington.—A letter says that Surry Parker of Pinetown, N. C., and R. S. Neal, Washington, N. C., are contractors for the proposed Mattamuskeet Railroad, which will be 105 miles long from Washington to Belhaven, Fairfield and other points. Route level. Two bridges required, one of 1000 feet and the other 500, each with draw. J. F. Taylor is president at Washington; H. C. Carter, vice-president at Fairfield; C. W. Davis, secretary and treasurer at Englehard, and R. Maxwell, chief engineer at Belhaven, N. C.

Okl., Alva.—Chairman J. E. Love of the Corporation Commission is reported saying that construction of the railroad promoted by H. A. Noah of Alva to run from Des Moines, N. M., through the northern counties of Oklahoma to Joplin, Mo., is practically assured, the route having been satisfactorily investigated by French capitalists.

Okl., Muskogee.—Wm. Kenefick, president, and J. J. Harrison, chief engineer, of the Missouri, Oklahoma & Gulf Railroad, are reported going over several contemplated routes for extensions in company with G. Faget of Paris, France, an engineer who represents foreign capital interested in the road. The extensions projected are from Wagoner, Okla., to Kansas City, Mo., and perhaps to Joplin; also from Henrietta via Shawnee to Oklahoma City, and from Denison, Tex., to Dallas and Fort Worth. A short extension to Okmulgee, Okla., is also in view. Construction on either will not begin before October.

Okl., Oklahoma City.—The Oklahoma Railway Co., according to a report quoting John W. Shartel, vice-president, is about to begin construction over one of the following routes: Yukon to El Reno, Moore to Norman, Edmond to Guthrie. The directors will decide within 10 days.

S. C., Charleston.—The Charleston & Northwestern Railway Co. has been granted a commission to build a railroad from Mount Pleasant, near Charleston, to Guering's Bridge, and thence to Bonneau on the Atlantic Coast Line about 35 miles north of Charleston, with a branch from near Guering's Bridge to McClellanville, near the sea coast, the road to be altogether about 60 miles long. Capital \$300,000, which may be increased to \$400,000. Petitioners: William C. Miller, Richard S. Whaley and William C. Bissell, all of Charleston. Mr. Miller is quoted as saying that he represents interests which he cannot now name. The Tuxbury Lumber Co. is reported behind the plan, but F. G. Davies, its vice-president, is said to have declined to discuss it.

Tenn., Elizabethton.—The Laurel Fork Railway, it is reported, has completed 7 miles of line from Elizabethton to Hampton and put it in operation. Construction is progressing toward the Laurel Fork section, 11 miles. Heavy rails and a substantial track are being laid. George H. Flinn of Pittsburg, Pa., is president, and D. O. Jones of Elizabethton, Tenn., is secretary and treasurer.

Tenn., Knoxville.—The Southern Railway has begun construction of 10 passing tracks, some of them between Knoxville and Chattanooga and others between Morristown, Tenn., and Asheville, N. C.

Tenn., Knoxville.—A letter confirms report that citizens of Carrollton, Ga., have applied to W. J. Oliver of Knoxville to build a railroad from coal fields in the eastern part of Tennessee via Knoxville to Carrollton and other points in Georgia, but says that no definite arrangements have been made to finance the plan. (See Manufacturers Record, June 15.)

Tenn., Memphis.—Walter Goodman, vice-president of the Lakeview Traction Co. is quoted saying that construction will be started this summer on the proposed extension from South Memphis to the city terminal. At the same time work will also begin on the extension from Horn Lake into Mississippi. W. W. Hayden is chief engineer at Memphis.

Tenn., Memphis.—The Illinois Central Railroad, it is said, will build switch and spur tracks on Main and Front Sts., in the vicinity of Calhoun Ave., to connect with wholesale houses. A large freight station is reported contemplated. A. S. Baldwin is chief engineer at Chicago, Ill.

Tenn., Nashville.—H. H. Mayberry, president of the Nashville & Gallatin Railway Co., is reported saying that A. M. Stalner, chief engineer, has finished survey and prepared plans for the proposed line, which will be about 30 miles long, and it is contemplated to award contracts in a few days.

Tex., Austin.—Reported that the State authorities contemplate building a railroad from the Ramsey farm to Chenango, on the International & Great Northern Railroad, about five miles. Governor O. B. Colquitt can probably give information.

Tex., Bartlett.—The Bartlett & Western Railway Co. is incorporated by the new owners of the Bartlett & Florence Railway with \$41,700 capital stock, and it is expected that the line will be completed from Jarrell to Florence, about 12½ miles, and possibly in the other direction to Rockdale. The officers are J. W. Jackson, president; C. J. Grainger, first vice-president and general manager; J. L. Bailey, second vice-president; W. W. Walton, secretary; C. C. Bailey, treasurer; Stanton Allen, attorney. Others interested are W. J. Cagle, H. A. Brelham, Mrs. M. A. Goode, J. D. Bell, Eugene Fowler, J. F. Brelham, T. E. Fowler and J. A. Bridge of Bartlett, Tex.

Tex., Bolton.—Construction has begun, it is reported, upon the proposed Quanah, Seymour, Dublin & Rockport Railroad promoted by L. E. Walker of Austin and others.

Tex., El Paso.—The El Paso & Southwestern Railway, says a dispatch, is surveying for a line up the Rio Grande Valley from El Paso to Elephant Butte, 25 miles. H. J. Simmons is general manager at El Paso, Tex.

Tex., Hidalgo.—The Land & Sugar Co., it is reported, upon the proposed Quanah, Seymour, Dublin & Rockport Railroad, near Hidalgo, to connect various points on its lands. C. D. Hellen of Des Moines, Iowa, and others are said to be interested.

Tex., Livingston.—Wm. Carlisle of Atchison, Kans., president of the Beaumont & Great Northern Railroad, is reported to have revived the plan to extend the line from the present terminus at Livingston to Beaumont, about 90 miles, provided rights of way and terminal sites are granted. He writes that nothing definite is decided.

Tex., Livingston.—W. H. Knox of Livingston, it is reported, proposes to build a railroad from Broadus to Sabinetown, 50 miles, to develop timber lands.

Tex., Quanah.—Another survey is reported being made for the Quanah, Acme & Pacific Railway.

W. Va., Hinton.—Papers are reported filed preliminary to building the Hinton, New River & Western Railroad along New River and Bluestone River. Raymond Dupuy, vice-president and general manager of the Virginian Railway, Norfolk, Va., it is rumored, is interested.

W. Va., Morgantown.—The Mount Morris & Morgantown Railroad Co. has been chartered to build a line from Morgantown to Mount Morris, Pa., about 10 miles, most of the line being in West Virginia. Capital \$125,000. Incorporators: William K. Hatfield and John Long of Mount Morris, Pa.; Plummer Bowly and Thomas Keenan of

Bowly, W. Va., and Rufus Lazell of Morgantown, W. Va.

STREET RAILWAYS

Ark., Fort Smith.—The Fort Smith Light & Traction Co., according to a report quoting an officer, will spend \$35,000 for improvements. J. W. Gillette is general manager.

Md., Cumberland.—Application is reported in West Virginia to charter the Ridgeley & Miller Avenue Railway Co. to build a line from the Blue Bridge over the Potomac to John L. Miller's farm, about two miles. It is expected to connect with the Cumberland Electric Railway at the bridge; incorporators, John L. Miller, Alfred Ridgeley, J. T. Vandergrift and R. A. Radcliffe, all of Ridgeley, W. Va., and Conrad Miller of Cumberland, Md.

N. C., Raleigh.—The Carolina Power & Light Co., says a letter, will soon advertise for bids to build a two-mile extension of electric railway from the city boundary to the Country Club.

N. C., Statesville.—T. H. Vanderford, W. F. Sakler, M. L. Jackson, T. D. Manes and Thomas L. Jerome, all of Salisbury, N. C., have, says a dispatch, applied for a street-railway franchise in Statesville. They are interested in the Salisbury & Spencer Railway.

Okl., Oklahoma City.—W. F. Harn is quoted saying that application will be made for a street railway franchise by himself, John F. Winans and Homer S. Hurst, if a deal for bonds is closed. They are interested in the Oklahoma City Land & Development Co., which has a line about four miles long, and which has also nearly completed an extension to the new capitol site.

Tex., Austin.—W. D. Shelly and associates, it is reported, contemplate building a two-mile electric railway in Austin.

Tex., Waco.—The Waco Street Railway Co. has filed incorporation articles; capital stock \$1,000,000. To operate street car and belt line in Waco. This is change of ownership, but improvements may be made. Incorporators: J. F. Strickland, Once Goodwin and M. B. Templeton, all of Dallas, Tex.

W. Va., Charleston.—An officer says that the Charleston-Dunbar Traction Co., just chartered, is to build a line about six miles long from Capital St. to Dunbar along the Kanawha River. Route level. Bids for construction and equipment will be opened July 10. Incorporators are Fred Paul Grosscup, president and general manager; J. Gluck, vice-president; Paul B. Grosscup, secretary and treasurer; W. C. Davidson and H. D. Hummel. John Cole is chief engineer.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

Air Compressor.—Box 559, Cincinnati, O., wants compressor with capacity of 500 feet free air per minute at 100 pounds air pressure; good condition; Oklahoma delivery. Send particulars and cut, with lowest dealers' price.

Bakery Equipment.—Co-operative Sanitary Baking Co., Frederick W. Mohr, president, Tampa, Fla., will install equipment for bakery.

Ball Bearings, etc.—V. M. Cooper, 558 Randolph Bldg., Memphis, Tenn., wants information and prices on ball and roller bearings.

Bathroom Equipment.—Wheeler & Stern, Charlotte, N. C., want prices on four tubs and two shower baths.

Belting.—Johnson Chair Co., Julian, N. C., wants belting.

Boats, etc.—Victor Rabe, Edmund-Haus, Catharinenstr. 45, Hamburg 8, Germany, wants to correspond with manufacturers of boats and oars; view to representation.

Boilers.—See "Engines and Boilers" and "Pumps, etc."

Boilers.—See "Dredging Machinery."

Boiler.—City of Americus, Ga., wants bids on 200 horse-power return tubular boiler; 150 pounds pressure; plans and specifications furnished by J. B. Ansley, City Engineer.

Bottle Seals, etc.—Carolina Gay-ola Co., 708 Main St., Columbia, S. C., wants prices on bottle caps, seals and labels.

Brick Machinery.—American Machinery & Supply Co., State National Bank Bldg., Oklahoma City, Okla., wants catalogues and prices on brick machinery; view to agency.

Bridge Construction.—Newberry County Commissioners, L. I. Feagle, chairman, Newberry, S. C., will award contract at 4 P. M. July 1 for construction of steel or iron bridge over Enoree River at Brazzleman's Ferry; plans and specifications may be seen on day of letting; bids to be sealed and delivered to board not later than 3 P. M. July 1; H. C. Holloway, clerk.

Bridge Construction.—J. P. Goodwin, Greenville County Supervisor, Greenville, S. C., will award contract at 10 A. M. June 27 at bridge site for construction of wooden bridge over Enoree River; plans and specifications made known on day of letting; certified check \$250.

Bridge Construction.—Bids will be received at office of George C. Baker, Jr., Fort Bend County Judge, Richmond, Tex., until 2 P. M. July 10 for delivery and erection of two steel highway bridges over Brazos River, one at Thompson, Tex., and other near Orchard, Tex.; copies of plans and specifications may be seen at County Clerk's office, Richmond, or of John W. Maxey, consulting engineer, 1716 Dallas Ave., Houston, Tex., or copy will be sent upon receipt of \$10; certified check \$1000.

Bridge Construction.—Bids received at clerk's office, Rocky Mount, Va., until noon July 3 for construction of bridge over Staun-

ton River at Hardy's Ford, between Franklin and Bedford counties; plans and specifications on file in clerk's office and office of P. St. J. Wilson, State Highway Commissioner, Richmond, Va.; certified check \$250; further information on application to P. St. J. Wilson.

Bridge Construction.—M. M. Spiars, County Clerk, Mayersville, Miss., receives bids until noon July 3 for repairing and placing new draws in all bridges in Issaquena county now over Steel's Bayou; plans and specifications on file in clerk's office.

Briquette Machinery, etc.—W. Reid, president Reid Coal Co., Dallas, Tex., wants information on compression of lignite into balls of briquettes and prices on machinery.

Building Materials.—W. S. Moore, 927 Muskogee St., Okmulgee, Okla., wants prices on building materials, including face brick, plaster, cement and lime, for school building at Beggs, Okla.

Building Materials.—Lange & Green, Asheville, N. C., will receive bids on marble, tiling, mill work and plastering.

Builders' Materials.—American Machinery & Supply Co., State National Bank Bldg., Oklahoma City, Okla., wants (with view to agency) catalogues and prices on sand, lime, cement, plaster, brick, roofing, chatts, rock, structural and reinforcing steel, etc.

Cable.—Office of Chief Signal Officer, Capt. A. S. Cowan, disbursing officer, War Department, Washington, D. C., will receive bids until 11.30 June 29 for 15,000 feet cable, type 306, paper insulated, submarine; specifications 427-b, 96-b, drg. 106; delivered on reels, 1500 feet lengths; new reels required.

Cables.—Rutherfordton Telephone Co., Rutherfordton, N. C., wants telephone cables.

Canneries.—John T. Mason, Mason Block, Hancock, Md., is interested in locating canning factories and an evaporating plant at Hancock.

Canal Construction.—Commissioners of Drainage District No. 2, Jefferson county, Arkansas, receive bids until July 3 at office of J. B. White, engineer of board, Pine Bluff, Ark., for digging drainage canal of about 200,000 cubic yards; plans, maps, profiles and specifications can be had from engineer; certified check for \$1000; usual rights reserved; C. H. Triplett, chairman of board.

Cars and Halls.—See "Turpentine-plant Equipment."

Cars.—Mattamuskeet Railroad Co., J. F. Tayloe, president, Washington, N. C., wants prices on four coaches, two combination baggage and express cars, 10 box cars and 20 flat cars.

Cement Stone.—Charles A. Popkin, Sapulpa, Okla., wants prices on cast cement stone.

Concrete Floors.—Wheeler & Stern, Charlotte, N. C., want prices on concrete floor for dining hall (lower floor).

Concrete Mixers.—M. L. Parker, Portsmouth, Va., wants concrete mixer.

Concrete Walks.—Sealed proposals, endorsed "Proposals for Concrete Walks at St. Helena Reservation," received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 A. M. July 8, and then opened, for concrete walks at St. Helena Reservation, Navy-yard, Norfolk, Va. Plans and specifications can be obtained on application to the bureau or to the commandant of the navy-yard named. R. C. Hollyday, Chief of Bureau.

Concrete Walks.—Bureau of Yards and Docks, R. C. Hollyday, chief, Washington, D. C., receives bids until 11 A. M. July 9 for concrete sidewalks at St. Helena Reservation, Navy-yard, Norfolk, Va. Plans and specifications can be obtained on application to bureau or to commandant of navy-yard named.

Conveying Machinery.—M. L. Parker, Portsmouth, Va., wants belt conveyor.

Crates.—Alfred E. Holmes, Box 977, Havana, Cuba, wants addresses of crate factories (in Georgia, Alabama, Louisiana, Texas and Florida preferred).

Desks.—C. W. Massey, Durham, N. C., will want prices on single desks for school purposes.

Dock Renewal.—Sealed proposals, endorsed "Proposals for Renewal of 'Richmond's Dock,'" received at Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 A. M. July 8, and then opened, for the "renewal of 'Richmond's' dock at the navy-yard, Norfolk, Va." Plans and specifications obtained on application to the bureau or to the commandant of the navy-yard named. R. C. Hollyday, Chief of Bureau.

Dredging.—Sealed proposals received until noon June 30 at office of Charles E. Bolling, City Engineer, Richmond, Va., for doing certain dredging along left shore of James River from Gillies Creek to Nicholson St.;

certified check for \$250; further information upon application; usual rights reserved.

Dredging.—United States Engineer Office, Jacksonville, Fla. Sealed proposals for dredging in Hillsboro Bay, Florida, received until 12 M. July 17. Information on application. George R. Spalding, Captain, Engineers.

Dredging.—U. S. Engineer Office, Galveston, Tex. Sealed proposals for dredging deep-water harbor at Harbor Island, Aransas Pass, Tex., will be received until 12 M. July 8. Information on application. G. P. Howell, Major, Engineers.

Dredging Machinery.—Box 559, Cincinnati, O., wants 45-horse-power dredging engine; also two horizontal 70 to 80-horse-power boilers; second-hand. Give particulars and price.

Dumbwaiters.—Joseph Schad, Wilmington, N. C., wants prices on dumbwaiter.

Electric-light Plant.—City of Selma, N. C., wants electric-light plant; John A. Mitchener, Mayor.

Electrical Machinery.—Q. D. Sauls, Tylertown, Miss., wants 50-kilowatt 2200-volt 60-cycle generator exciter; alternating current; second-hand; good condition.

Electrical Machinery.—Storm Equipment & Supply Co., 209 American National Bank Bldg., Richmond, Va., wants prices, with view to representation, on second-hand motors and generators. Give particulars.

Electric-light Plant.—Paul Lumber Co., Walsh, P. O. Poplar Bluff, Mo., may install electric-light plant.

Electric-light Plant.—P. M. Woodall, Coffeeville, Miss., wants to correspond with manufacturers of machinery for electric-light plant for town of 700 or 800 people; gas-producer type to burn lignite preferred.

Electrical Machinery.—S. T. Atkinson, Hotel Richmond, Richmond, Va., wants prices on two 250-horse-power water-tube boilers; two 150-horse-power four-valve engines direct connected to generators, two 100-kilowatt generators, pumps, etc.

Elevators.—Joseph Schad, Wilmington, N. C., wants prices on hand-power elevators.

Elevators.—S. T. Atkinson, Hotel Richmond, Richmond, Va., wants prices on four elevators.

Elevators.—Lange & Green, Asheville, N. C., will receive bids on one freight and two passenger elevators.

Evaporating Plant.—See "Canneries."

Excavation.—Orange County Commission, Orlando, Fla., will receive bids at office of clerk of court in courthouse at Orlando until noon July 17 for improving St. Johns River ferry at Geneva-avenue crossing, at mouth of Lake Jessup, by deepening, widening and straightening cut-off channel north of present ferry channel and crossing; work consists of excavation 100x750 feet and average of seven feet deep, approximating 20,000 cubic yards; plans and specifications now on file at above office; B. M. Robinson, clerk of Circuit Court.

Engines and Boilers.—Storm Equipment & Supply Co., 209 American National Bank Bldg., Richmond, Va., wants, with view to representation, prices on second-hand engines and boilers. Give particulars.

Farm Tractor.—A. W. Sherwood, R. F. D. No. 4, McDonough, Ga., wants to correspond with manufacturers of motor tractors for field work.

Filing Cabinets.—Bogart Gas Power Engineering Co., Buffalo, N. Y., wants addresses of manufacturers of wooden and steel cabinets for filing blueprints, drawings, etc.

Filling.—Davidson County Turpike Board, Nashville, Tenn., receives bids until 10 A. M. July 5 for additional earth filling to widen approach to Hyde's Ferry bridge; quantity of filling, 35,000 cubic yards; plans and specifications on file with engineer of board, 407 Cole Bldg., Nashville; certified check \$1000; S. G. Marshall, superintendent turpikes of Davidson county, 405 Cole Bldg., Nashville.

Flour Mill, etc.—I. S. England, Raccoon Ford, Va., wants equipment for flour, feed and meal mill.

Gas Plant.—City of Greenwood, S. C., wants gas plant; 8000 population; would consider granting franchise; desires correspondence. Address G. W. Gardner, care of Greenwood Journal.

Gas Plant.—Board of Trade, S. Brooks Marshall, secretary, Greenwood, S. C., wants to correspond with interested parties relative to location of gas plant at Greenwood.

Glassware.—Alfred E. Holmes, Box 977, Havana, Cuba, wants addresses of manufacturers of glassware, including tumblers, dishes, bottles, etc.

Grading.—The Pitzman Company, surveyor and engineer, 615 Chestnut St., St.

Louis, Mo., will receive bids until noon July 17 for grading Tesson tract, between Pennsylvania Ave. and Hanley Rd., and for Shaw tract, west of Grand Ave., between Shaw and McRee Aves.; former will require the removal of about 100,000 cubic yards and latter about 15,000 cubic yards. For blank bids and specifications address Pitzman Company.

Heating Plant.—W. S. Moore, 927 Muskogee St., Okmulgee, Okla., wants prices on hot-air furnace for school building at Beggs, Okla.

Heating Plant.—C. W. Massey, Durham, N. C., will want prices on heating plant for \$15,000 school building.

Heating Plant.—Lecompte, La., will receive bids until noon July 5 for construction and installation of steam-heating plant in high-school building; certified check \$100; J. R. Moore, Mayor.

Hoisting Engines, etc.—Kentucky Stave & Tie Co., Rockholds, Ky., wants hoisting engines and drums.

Hose.—Sealed proposals will be received by city of Opelousas, La., until noon June 24 for purchase of 1000 feet of 2½ "multiple woven" fiber hose fitted with Anderson couplings; bids to be addressed to J. B. A. Stagg, City Clerk; M. Halphen, Mayor.

Hydro-electric Plant.—Storm Equipment & Supply Co., 209 American National Bank Bldg., Richmond, Va., wants prices on pumps, motors, etc., for complete installation of hydro-electric plant; would consider representing manufacturers. Send catalogues.

Ice and Cold-storage Plants.—John T. Mason, Mason Block, Hancock, Md., is interested in locating ice plant and large cold-storage plant at Hancock.

Ice Machine.—M. W. Potter, Arapahoe, N. C., wants 1½ to 3-ton ice plant; operate in connection with woodworking plant.

Ice Machinery.—S. T. Atkinson, Hotel Richmond, Richmond, Va., wants prices on 15-ton ice and refrigerating plant.

Ice Machinery.—American Machinery & Supply Co., State National Bank Bldg., Oklahoma City, Okla., wants catalogues and prices on ice machinery; view to agency.

Iron and Steel.—U. S. Engineer Office, Dallas, Tex. Sealed proposals for iron and steel, delivered at Kleburg, Tex., on Texas & New Orleans Railway, will be received until 12 M. July 15. T. H. Jackson, Captain, Engineers.

Laundry Machinery.—American Machinery & Supply Co., State National Bank Bldg., Oklahoma City, Okla., wants catalogues and prices on laundry machinery; view to agency.

Lighting Fixtures.—Office of Commissioners of District of Columbia, Washington, D. C. Sealed proposals received until June 26 for furnishing and installing lighting fixtures in McKinley Manual Training School; specifications and form of proposal obtained upon application to Property Clerk, D. C., Room 320 District Bldg.

Locomotives.—Mattamuskeet Railroad Co., J. F. Tayloe, president, Washington, N. C., wants prices on four locomotives.

Locomotive.—F. V. B. Price & Co., Pine-hur, Miss., will purchase locomotive.

Locomotive.—Box 559, Cincinnati, O., wants second-hand geared locomotive; 42-inch gauge; 28 to 36 tons; Southern delivery. Give particulars and lowest dealers' price.

Lubricating Oils.—Alfred E. Holmes, Box 977, Havana, Cuba, wants addresses of manufacturers of lubricating oils.

Machine-shop Equipment, etc.—Decherd Mill Co., Decherd, Tenn., will install complete equipment for machine and tin shop.

Machine Tools, etc.—F. G. Stauffer, 1209 James Bldg., Chattanooga, Tenn., wants emery stand, wire crimping machine, small punch, hand shear and drill press.

Mail-handling System.—Treasury Department, Office of Supervising Architect, James Knox Taylor, Washington, D. C. Sealed proposals received until 3 P. M. July 17, and then opened, for mechanical system of mail-handling apparatus in United States postoffice, St. Louis, Mo., in accordance with specification and drawings enumerated therein, copies of which may be obtained at this office, at discretion of supervising architect.

Mantels.—Hook & Rogers, Charlotte, N. C., want prices on mantels.

Manufactures.—M. Kohan, Galatz, Rumania, is interested in prices (commission, etc.) on American manufactures, including machinery and technical lines.

Metal Roofing.—Wheeler & Stern, Charlotte, N. C., want prices on tin roof.

Mill Supplies.—Johnson Chair Co., Julian, N. C., wants mill supplies.

Mining Machinery.—Geo. K. Cooper

Mica Mining & Manufacturing Co., P. J. Boelte, president, Danville, Va., wants prices on equipment for mica-mining plant at Axton, Va.

Miscellaneous Machinery, etc.—American Machinery & Supply Co., State National Bank Bldg., Oklahoma City, Okla., wants (with view to agency) catalogues and prices on water-works equipment; steam and electric pumping machinery; air compressors; water towers and standpipes; fire hydrants and gate valves; power-plant equipment; automatic engines; horizontal, tubular and water-tube boilers; feed-water heaters; condensing apparatus; hoisting, conveying and transmission machinery; electric, hydraulic, locomotive and hand-power cranes; gas producers; contractors' equipment; concrete mixers and plaster mixers.

Naval Supplies.—Proposals will be received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 10 A. M. June 27 to furnish at navy-yard, Charleston, S. C., quantity of naval supplies as follows: Schedule 3681, cutting machine; schedule 3686, armature coils. Applications for proposals should designate the schedules desired by number. Blank proposals will be furnished upon application to navy pay office, Charleston, S. C., or to bureau. T. J. Cowie, Paymaster-General, U. S. N.

Naval Supplies.—Proposals received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 10 A. M. June 27, and opened immediately thereafter, to furnish at the navy-yard, Norfolk, Va., a quantity of naval supplies as follows: Schedule 3658, machine tools, electric motor; schedule 3689, liquid metal polish, white zinc; schedule 3691, hardware and tools; schedule 3692, copper tubing. Applications for proposals should designate the schedules desired by number. Blank proposals will be furnished upon application to the navy pay office, Norfolk, Va., or to the bureau. T. J. Cowie, Paymaster-General, U. S. N.

Naval Supplies.—Proposals received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 10 A. M. July 5, and opened immediately thereafter, to furnish at navy-yard, Charleston, S. C., a quantity of naval supplies as follows: Schedule 3700, sledges; schedule 3702, bar steel, sheet lead, yellow pine. Applications for proposals should designate schedules desired by number. Blank proposals furnished upon application to navy pay office, Charleston, S. C., or to the bureau. T. J. Cowie, Paymaster-General, U. S. N.

Naval Supplies.—Proposals received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 10 A. M. July 5, and opened immediately thereafter, to furnish at navy-yard, Washington, D. C., a quantity of sheet steel, drafting-room supplies, reckoning machine. Applications for proposals should refer to schedule 3699. Blank proposals furnished upon application to the bureau. T. J. Cowie, Paymaster-General, U. S. N.

Oars.—See "Boats, etc."

Oil-mill Machinery.—J. D. Hodges, Mocksville, N. C., wants small equipment for manufacturing cottonseed oil.

Paint Material.—Paint, Glass & Builders' Supply Co., Anniston, Ala., will want raw material for manufacturing paint.

Paving.—Baltimore (Md.) Board of Awards receives bids at City Register's office, City Hall, until 11 A. M. June 28 to grade, curb and pave with sheet asphalt on cobble base; Calvert St. from north end of bridge over Jones' Falls to North Ave., and Lanvale St. from Charles St. to Greenmount Ave.; specifications and proposal sheets furnished upon application to office of B. T. Fendall, City Engineer.

Paving.—Sealed bids will be received by Pike Road Commissioners of Grainger county, Rutledge, Tenn., until 10 A. M. July 1 for grading 16½ miles of county highway. Separate bids are requested for following sections: Section 1, from Rutledge to Walker's Bridge, about 6 miles; section 2, from Walker's Bridge to the residence of W. A. Jarnagin, about 5½ miles; section 3, from residence of W. A. Jarnagin to Knox county line, about 5½ miles. Plans and specifications may be seen at office of engineers in courthouse at Rutledge after June 25; bids on each separate section to be accompanied with certified check for \$500 or upon entire 16½ miles by check for \$1500; A. M. Nance, secretary Road Commission.

Paving Blocks.—Baltimore (Md.) Board of Awards, care of City Register, City Hall, receives bids until June 21 for furnishing wood paving blocks for general purposes in City Engineer's Department during 1911; specifications and blank proposal forms can be had on application at office of B. T. Fendall, City Engineer.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

R.; Saratoga, Friedlaender & Olven Lumber Co., G. C. & S. F. R. R.; and Crockett, Houston County Lumber Co., I. & G. N. R. R.

Graduate Courses in Highway Engineering.

The graduate courses of study in highway engineering which will be established at Columbia University, New York, next year will be under the charge of Arthur H. Blanchard, M. Am. Soc. C. E., Consulting Highway Engineer. Mr. Blanchard has resigned from the position of Associate Professor of Civil Engineering at Brown University for the purpose of accepting the appointment as Professor of Highway Engineering at Columbia University. His office as consulting highway engineer is at 171 Westminster St., Providence.

Columbia Cordage Used.

The commencement of the voyage of three amateur yachtsmen from Providence, R. I., in a 25-foot yawl, bound to Rome, Italy, has attracted wide attention from the daring features of such an undertaking. The Columbian Rope Co., Auburn, N. Y., takes a pardonable pride in the fact that the cordage selected for equipping the yawl with running rigging was the product of that company. This company manufactures the Columbian and Eureka brands of rope and twine. The New York office and warehouse is at 62 South street, and Chicago office and warehouse, 370 River street.

Foundry and Machine Shop for Sale.

An old-established and well-equipped brass and iron foundry and machine shop, located in one of the rapidly-growing cities of the South, is offered for sale by J. Edward Tyler, Jr., 217 St. Paul St., Baltimore. This property is to be sold in order to close an estate, and any reasonable offer will be accepted. The lot is 180x174 feet, and the buildings consist of an L-shaped brick building, three stories, 174 feet and 150 feet by 36 feet deep and 50 feet deep, respectively. This is the machine shop, and the foundry, a brick building 80 feet square, is connected with it. The plant is equipped with boiler and engine and the necessary furnaces, cranes, etc., and a large number of patterns.

New Process Vitriol Brick.

Patent rights covering a new process of making vitriol bricks have been secured by The Enamel Vitriol Brick Co., Toledo, O. The bricks made by this process contain approximately 94 per cent. sand and are as hard as granite. They can be made any desired color, and the makers claim that they can be manufactured to compete with the better grades of brick made by the usual processes. The company is securing data as regards sand and fuel supplies in the various parts of the United States, with a view of selling manufacturing rights and the establishment of plants. It is stated that the requirements of such plants will be from 10 to 30 carloads of sand per day and an assured supply for at least 15 years.

Specialists in Fire Protective Equipment.

The Akers Fire Protective Co., Memphis, Tenn., has been incorporated in order to better handle the various lines which the firm of Akers & Co. has carried for three years with constantly increasing business. The company sells and erects fire protective devices, fire doors, metal windows, fire extinguishers, fire escapes, all kinds of fire retarding devices, elevator equipment, such as safety gates, doors, enclosures and safety appliances; asbestos protected metal roofing, ventilators, skylights, etc. The company now represents several well-known manufacturers of fire protective materials and devices, and it is in a position to represent a few factories on a commission basis.

A General Manufacturers' Agency.

The American Machinery & Supply Co., Oklahoma City, has established a manufacturers' agency in the State National Bank Building, Oklahoma. This agency will handle steam and electric-pumping machinery, air compressors, water towers and stand pipes, fire hydrants and gate valves, power plant equipment, automatic engines; horizontal, tubular and water-tube boilers; feed-water heaters, condensing apparatus, air-lift pumping plants; electric, hydraulic, locomotive and hand-power cranes; gas producers, contractors' equipment, concrete mixers, builders' supplies, sand, lime, cement, plaster, brick, roofing, rock, structural and reinforcing steel, etc. The company requests catalogues, literature, prices and correspondence pertaining to these items.

Rushed With Manufacturing Work.

J. G. Spedel, Reading, Pa., manufacturer of elevators, cranes, chain hoists, dumb-

walters, etc., writes that his plant has been rushed with work for the last three months and that the prospects for the balance of the year are good. He states: "I have done a large business with the trade of the South and Southwest for many years, but am pleased to say that I have noticed quite a material increase in the volume of business received from this territory during the last six months." A specialty is made of selling hand, belt and electric elevator machinery or elevators complete, ready to erect. In case of a private individual wishing to make installation, all the information needed is given, so that a carpenter or millwright can do the erecting. Machines are made for elevator companies, either in part or complete. The Nashville Machine Co., Nashville, and Fred W. Walter, 33 Atlantic St., Norfolk, are agents for the Spedel products, and other agencies will be established in different sections of the country. Mr. Spedel also notes a large number of sales of cranes in the past six months.

Increasing Capacity of Fire-Brick Plant.

In order to meet the increasing demand for its "Mount Savage" and other brands of fire brick, the Union Mining Co., Fidelity Bldg., Baltimore, proprietor of the Mount Savage Fire Brick Works, Mount Savage, Md., is adding an extension to the already large plant. The Mount Savage plant will have a capacity of 100,000 nine-inch bricks per day when the extension is completed. Attention will also be given to the manufacture of unusual forms of bricks as required in the iron, steel and allied trades, in the lime and cement industries, for water-gas retort linings, gas bench settings, etc. The Mount Savage Brick Works have been continuously and successfully operated since 1841, and it is stated that a sufficient supply of the Mount Savage flint and plastic clays is controlled to last indefinitely. Its research department gives constant attention to the mixing, grinding and burning of its clays and producing results fulfilling the requirements of its products. The company maintains offices in New York and Pittsburgh and has representatives in other principal cities.

The Storm Equipment & Supply Co.

The Storm Equipment & Supply Co., 209 American National Bank Bldg., Richmond, Va., has recently established a business in the sale of elevators, both passenger and freight, steam and gasoline engines, boilers, motors, generators, controllers and accessories. This company supplies equipment and machinery complete and installs same if required. Among the inquiries at present in hand are those for the following material and machinery: Pumps, motors and accessories for the complete installation of a hydro-electric plant; engine, boiler and supply pumps for a manufacturing plant; tanks, pumps and accessories for supplying water to a town. The company desires to purchase equipments and material covering the items mentioned, and requests that catalogues or descriptions showing machinery in detail be furnished when letters are written regarding these items. Second-hand motors, generators, engines and boilers in first-class condition will be purchased, of which the horse-power, length of service, etc., should be stated. This company will also act as manufacturers' agent for complete mechanical and electrical equipments and accessories, and correspondence regarding such representation is requested.

A Texas Motor Car Factory.

The Commercial Motor Car Co., South Houston, Tex., has been organized to manufacture commercial motor trucks at that place under the Twyford patents. The company has purchased the Texas Engine & Manufacturing Co.'s plant with all machinery, and a stove foundry plant in the same locality. The plant will manufacture all the required parts and will have a capacity of one completed truck per day. The prices will range from \$1200 for a 1000-pound truck to \$4500 for a 5-ton truck. The distinguishing feature of the Twyford patent consists in the application of power to all four wheels, and also to the development of a new and powerful engine. The car has several other advantages in its construction, including a brake on each wheel and a foot brake on the shaft for the purpose of eliminating skidding. There is also an emergency brake on the rear wheels and a three-speed equipment, as in other cars. Another advantage claimed for this truck is the fact that should a breakdown occur in either transmission set, it can be disconnected and the car continue operating with the other two wheels in gear. The officers of the company are Z. Z. Brandon, president; R. E. Twyford, vice-president, and L. J. Brandon,

secretary and treasurer, of South Houston, Texas.

Installations of Bank Fixtures.

Among the numerous important contracts now in hand by the Geo. W. Muller Bank Fixture Co. of Atlanta, Ga., are the following: Overhauling the Barnett National Bank Bldg. at Jacksonville at a cost of \$125,000, which includes a marble and bronze finish of the interior; furniture, fixtures and overhauling the First National Bank, Jacksonville, including the new vault, \$11,000; overhauling the Security Bldg., and supplying new bank furniture and fixtures for the First State Bank at Denison, Tex., \$20,000; interior finish of the Louisiana National Bank, Baton Rouge, in marble, bronze and mahogany, \$50,000; remodeling the Putnam National Bank and installing new fixtures, vault, etc., Palatka, Fla., \$17,500; a new bank building at St. Petersburg, Fla., for the Central National Bank, \$40,000; new furniture and fixtures in the People's Bank, Clearwater, Fla.; overhauling First National Bank Bldg., St. Petersburg, Fla.; remodeling interior of the Bank of Manatee, Bradenton, Fla.; extensive work for the Bank of Bay Biscayne, Miami, Fla.; remodeling interior of the Exchange National Bank, Tampa; interior of Bank of Western Carolina, Aiken, S. C.; overhauling the building and installing new furniture and fixtures for the Merchants and Planters' Bank, Griffin, Ga. About 1000 banks have been fitted up in past 18 years, 200 bank buildings remodeled and 26 new buildings erected under the supervision of Mr. Muller, president of this company.

TRADE LITERATURE.

Push Plate Price-List.

A standard price list of the push and kick plates in brass and bronze as made at the "Gilbert Brass Works" by the A. Gilbert & Sons Brass Foundry Co., St. Louis, Mo., is published in Bulletin "C," recently issued. This price list gives dimensions, gauge, description and terms regarding these push and kick plates. It will be furnished upon request, and should be of especial interest to dealers in these lines of hardware.

"Banner" Hydrate Lime.

In response to a persistent demand for information regarding "Banner" hydrate lime, a new edition of its booklet has been issued by the National Mortar & Supply Co., Pittsburgh, Pa. This company manufactures the "Banner" hydrate lime for all kinds of fine and rough plastering, brick work, stone work and whitewashing, and fertilizer lime for farmers' and gardeners' use. The works, which have been recently doubled in capacity, are located at Gibsonburg, O., where the dolomite lime rock is found in large quantities and of the required quality for making hydrate lime. This booklet gives the general uses for this lime and directions for mixing and applying it. Notwithstanding the increased capacity of the plant, it has been running full time steadily and marketing the full capacity readily.

"American" Well-Drilling Cable.

Close study of the trying conditions incidental to well drilling and years of experimenting have enabled the American Manufacturing Co., 65 Wall street, New York, to produce a drilling cable which the company states will now fill the requirements for this class of work. The manner in which this rope is made, the materials, treatment, etc., are described and illustrated in the "American" drilling cable booklet recently issued. Other products of the American Manufacturing Co., described in the booklet, include "American" sand lines, "American" sucker-rod lines, "American" tubing lines, torpedo lines, Manila bull ropes and Italian hemp packing. An interesting narrative of the growth, collection and treatment of the Manila fiber in the Philippines is included in the booklet.

Worthington Centrifugal Pumps.

Worthington type "D" centrifugal pumps are illustrated and described in catalogue W-176-A, and Worthington centrifugal house and sump pumps in catalogue W-185, issued by the International Steam Pump Co., 115 Broadway, New York. The type "D" pump is a low-priced pump, especially suitable for contract work, such as pumping out cofferdams and excavations; also for small irrigation plants, where low first cost is of chief importance. The Worthington house pumps are found suitable for house tank service on account of the simplicity and its noiseless operation. They are particularly useful for increasing the city water pressure in office buildings, hotels and apartment-houses. The sump pumps are particu-

larly adapted for draining sumps located below the level of sewer pipe. Directions for installing and operating all these pumps are given in the catalogues, also tables of sizes, capacities, etc.

The American Fertilizer Handbook.

The American Fertilizer Hand Book for 1911 is a directory of the commercial fertilizer industry and allied trades. It includes a number of special articles on "The Phosphate Fields of Florida," "Essential Elements of Plant Food," "Value of the Use of Commercial Fertilizers," "Phosphate Rock Statistics," etc. Sulphuric acid tables, with corrections of hydrometer readings for temperature, are also given. The directory section of the book contains the directory of commercial fertilizer manufacturers in the United States, keyed to indicate the nature of their business and arranged by States; a directory of cottonseed-oil mills; a classified directory of the allied fertilizer trades, which include manufacturers of and dealers in fertilizer materials and supplies and factory equipments; a directory of phosphate miners, sulphuric acid plants, brokers, importers, exporters, chemists, lead burners, packers, etc. It is published by the Ware Bros. Company, Philadelphia. Price \$3.

Smith Stone-Crushing Equipment.

The great national movement towards the improvement of roads has created a growing demand for road-making machinery. Manufacturers of machinery have responded with a great variety of equipment for every requirement of the road builder, including the machinery necessary for the preparation of the road materials. The Smith Crushing Equipment Catalogue, recently issued by the T. L. Smith Company, Majestic Bldg., Milwaukee, describes and illustrates the Smith jaw crushers and the Simons portable gyratory crusher as made by the T. L. Smith Company. The description of these crushers also includes a mounted type with folding elevator. Other products of the Smith company included in this catalogue are portable stone bins, revolving screens, chain and belt elevators. Several dimension and information tables are also given. In addition to the above this company makes Smith mixers, Smith concrete elevators, Smith concrete cars, and a complete line of equipment for contractors and quarries.

The Rust Water-Tube Boiler.

Description of the manufacture, uses and advantages of the Rust water-tube boiler, together with 40 illustrations of the boiler in different stages of construction, are given in a cloth-bound catalogue recently issued by the Babcock & Wilcox Company, 85 Liberty St., New York. The Rust boiler is the invention of E. G. Rust, and was first installed in the Pueblo (Col.) works of the Colorado Fuel & Iron Co., Mr. Rust then being chief engineer and superintendent of that plant. It is the result of a systematic effort to produce a safe, durable and economical steam generator for difficult boiler conditions. In 1908 the plant and business of the Rust Boiler Co. were acquired by the Babcock & Wilcox Company. Tables of efficiency and capacity tests are given in the catalogue in considerable detail. The works of the Babcock & Wilcox Company are located at Bayonne, N. J., and Barberton, O., and the manufactures include Babcock & Wilcox boilers, Sterling boilers, besides the Rust boiler, and steam superheaters, mechanical stokers, etc.

ST. JOSEPH'S PROGRESS.

Marked Changes Wrought in Past Fifteen Years.

[Special Cor. Manufacturers Record.]

St. Joseph, Mo., June 9.

Notwithstanding the black eye given her by the census of 1910, St. Joseph has undoubtedly made greater progress within the past decade than during any previous ten years of its existence. Evidently a serious blunder was made either in the census enumeration of 1900 or in that of 1910. Possibly some of her young men in 1900, being unduly ambitious to give their city prominence, may have acquiesced, if not connived, at the padding of the city's census. The writer, however, who since her incorporation as a town, in 1845, has been in touch with the old city, and who for 46 years was a resident and intimately connected with affairs, both business and civic, prefers to believe that the greater blunder in the census enumeration was made in 1910, for if comparison of old cen-

ditions with the new counts for anything. St. Joseph has fully 100,000 population today.

After an absence of 15 years, your correspondent found himself a few days ago again in his old home city. To say that he was surprised at the progress made would be putting it mild. Old St. Joseph had vanished and new St. Joseph, an imperial city, spread itself out before him, truly a revelation. As he traversed the once familiar streets it was difficult for him to designate any particular spot upon which an early landmark had stood, for the very simple reason that lot after lot and block after block on the principal streets, vacant at the time he left, had been solidly built up, while most of the early business houses had been torn out and replaced with modern structures or remodeled inside and out. At night the great "white way" on Felix street, extending from the Missouri River to Frederick avenue, presented a scene well calculated to entrance the soul of any lover of beauty. In addition the residence portion of the city had spread out over miles and miles of new territory.

In the early days of St. Joseph your correspondent was deeply interested in the promotion of manufactures; in fact, he was a manufacturer. He hoped and prayed that some day during his lifetime St. Joseph would become a great manufacturing city. It required only a little investigation to prove to him that during his absence his hopes and prayers had been answered, for today statistics show St. Joseph to be not only the second manufacturing city in Missouri, but in several lines, such as boots, shoes, overalls, clothing, saddlery, cutlery, hardware, woolen goods, etc., she ranks well up with any other city in the United States.

A visit to the manufacturing district of the city was an eye-opener to the writer. Where had been one and two-story shacks, now stood mammoth buildings, some of them covering blocks of ground, devoted to manufacturing.

From its early existence St. Joseph has been known as an outfitting and jobbing point. It was here that the emigrants for California and the far West in 1849 and the early 50s were outfitted for the then long and tedious journey across the plains. It was from this point that the great wagon and ox trains, loaded with the necessities of life, took their departure to the West and kept pace with the demands of the pioneers who opened up the vast territory between the Missouri River and the Golden Gate. In fact, while it is true that St. Louis can be considered the mother of St. Joseph, Joseph Robidoux, its founder, having been bred and born in the former city, St. Joseph is really the mother of the great West. To it came the farthest railroad west, the Hannibal & St. Joseph, and to one of its citizens, Wm. A. Davis, deceased, an early postmaster of the city, that the credit of inaugurating the railway mail service is due, although the credit was given to another. With the coming of the Hannibal & St. Joseph Railroad to St. Joseph, in 1859, also came the overland mails, and it was to facilitate a distribution of these that Wm. A. Davis applied to the Postoffice Department for the privilege of fitting up a couple of baggage cars for mail purposes. On these cars the first railway mail distribution in the United States was made. It was from St. Joseph that Russell, Majors and Waddell handled their great wagon tonnage throughout the West, and from here the pony express between the Missouri River and Sacramento was inaugurated and kept up until superseded by the overland telegraph.

In this connection your correspondent remembers to have stood on one side of the first pony that left St. Joseph, while M. Jeff Thompson, then Mayor of the town,

afterward the famous general, stood on the other and gave the word "go." What mighty developments have followed in the wake of that fleeting pony? For several years after this Ben Holliday, proprietor of the great Overland Mail Line, had his headquarters and started his coaches from St. Joseph, the point of departure receding from St. Joseph as the building of the Union Pacific Railroad advanced. It is not generally understood, but none the less true, that the electric trolley lines were first brought into practical use in this city. They had been tried elsewhere, but failed. The Spragues, patentees and promoters of this system, came to St. Joseph at the invitation of Steinacher, the principal owner of the mule-car line, then in operation in the city. During the winter a stretch of the new Elm line was not much used, and Steinacher turned that over to the Spragues for experimental purposes. After several months the system was perfected and the line brought into the city, where it quickly superseded all the mule lines. From St. Joseph the trolley line spread throughout the United States.

But the writer must not indulge in reminiscences. These cut no figure in the busy walks of trade. It is well enough for an old man to dream and to occasionally make a spiel touching events of the long, long ago. The young man of today must keep his eyes to the front. He must understand that there is competition, not only among the men in business, but rivalry between cities; that success in business depends upon the men who handle it, and that the prosperity of a city rests not upon its resources, nor yet upon its location, but upon the unanimity with which the men, and, for that matter, the women, stand by and back up its aspirations. Young men are at the helm in St. Joseph. They are looking to the front, banking not only upon their own worldly futures, but determined to make their city one of the greatest manufacturing and jobbing cities of the United States. Nor are they neglecting those civic duties which always tend to make a city not only a good place in which to live, but renders it a thing of beauty and a joy forever.

St. Joseph today, though not ranking in population with many cities much younger than herself, is yet really far ahead of the most of them in everything that enters into the make-up of a solid city. Its railroad facilities are not exceeded by those of any city, East or West, while trolley and suburban lines give ample facilities for local travel. The stockyards are modern in every respect, and in amount of business done compare favorably with the yards of any other city. Banking capital is ample to cover any possible emergency, and can be increased practically without limit. Only a few years ago St. Joseph was rated as the wealthiest city per capita in the United States, and it is the opinion of the writer that the increase in population has not changed its position relative to per capita wealth.

St. Joseph has in the past had many serious backsets. It is now safe to say that for all the future it has a clear track, and that it will not be many years until it can possibly again take rank as the second city in Missouri.

F. M. POSEGATE.

Steel Rail Orders.

(Special Dispatch to Manufacturers Record.)

New York, June 21.

Kansas City Southern Railroad has placed orders with the Pennsylvania Steel Co. for 4775 tons of rails. The Carnegie Company has received various orders aggregating 10,000 tons. Illinois Company has miscellaneous orders for 4800 tons. Tennessee Coal, Iron & Railroad Co. sold 140 tons.

FINANCIAL NEWS

Review of the Baltimore Market.

Office MANUFACTURERS RECORD,

Baltimore, Md., June 21.

The Baltimore stock market during the past week was rather quiet. In the trading United Railways common sold from 17½ to 19; do. incomes, 62½ to 64; do. funding 5s, 87 to 87½; do. do. scrip, 87 to 88; do. 4s, 85 to 85½; Consolidated Gas, Electric Light & Power common, 93 to 93½, reacting to 92½; do. preferred, 100 to 100; do. 4½s, 87½ to 87¾; Consolidated Gas 4½s, 97¾; Seaboard Air Line common, 26¼; Seaboard Company second preferred, 61½ to 61; Seaboard 4s, stamped, 87¼; do. adjustment 5s, 79¾; Consolidated Cotton Duck preferred, 17½; Mt. Vernon-Woodberry Cotton Duck 5s, 76¾ to 76½; G. B. S. Brewing incomes, 5½ to 6; do. 4s, 43.

Bank stock sold as follows: Bank of Baltimore, 174½; Bank of Commerce, 31¾; First National, 152.

Baltimore Trust sold at 170; Fidelity & Deposit, 152¾ to 151; United States Fidelity, 165; Maryland Casualty, 95; Union Trust, 69½; Maryland Trust common, 91; Mercantile Trust, 150.

Other securities were traded in thus: Atlantic Coast Line of Connecticut, 249; Baltimore Traction 5s, 107; Norfolk & Portsmouth Traction 5s, 87¾ to 88; do. preferred, 77½; Baltimore City Passenger 5s, 100¾; do. 4½s, 100; Atlantic Coast Line convertible debenture 4s, 90¾ to 100½; Alabama Consolidated Coal & Iron 5s, 86½ to 86¾; do. common, 40; do. preferred, 80; Detroit United 4½s, 82; Consolidation Coal 1st and refunding 5s, 96; do. 4½s, 93¼; Consolidation Coal stock, 104 to 105; do. receipts, 25 per cent. paid, 29½; Florida Southern 4s, 91¾; Houston Oil common, 7½ to 8; do. preferred, 57¾ to 58; Roland Park Electric & Water 5s, 1937, 100; Northern Central Railway stock, 129; Fairmont & Clarksburg Traction preferred, 84 to 86; do. 5s, 101; Frederick City 4s, 1918, 97; Milwaukee Refunding 4½s, 93; Baltimore Electric 5s, stamped, 95¾ to 96½; Maryland Electric 5s, 98¾ to 99; West Penn Traction 5s, 97¾; City & Suburban (Baltimore) 5s, 105½; Atlanta Consolidated Street Railway 5s, 105; Norfolk Railway & Light 5s, 90¾ to 90¾; Chicago Railways 5s, 100 to 99¾; Baltimore City 3½s, 1980, 89; do. 4s, 1961, 8. H., 102¼; City & Suburban (Washington) 5s, 103¼ to 103; Coal & Iron Railway 5s, 102; Atlantic Coast Line 4s, certificates, 85; Augusta & Aiken preferred, 72; Fairmont Coal 1st 5s, 97¾; Milwaukee Gas 4s, 90¾; Norfolk & Atlantic Terminal 5s, 95; Maryland 3½s, 1924, 95; Merchants & Miners' Transportation Co., voting trust, 73½ to 73; Lexington Railway 5s, 95; Anacostia & Potomac 5s, guaranteed, 103; Atlantic Coast Line of Connecticut 5-20s, 94; Baltimore Brick preferred, 30; Georgia & Alabama Consolidated 5s, 105¾; Virginia Railway & Power preferred, 80¾.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended June 21, 1911.

Railroad Stocks.	Par.	Bid.	Asked
Atlantic Coast Line.....	100	131¼	132½
Atlantic Coast of Conn.....	100	247	250
Charleston Consolidated.....	50	34	...
Fairmont & Clarks. Trac. Com.....	100	62	...
Fairmont & Clarks. Trac. Pfd.....	100	83½	83½
Fairmont & Fla. 1st Pfd.....	100	92½	...
Georgia Sou. & Fla. 2d Pfd.....	100	75	80
Norfolk Railway & Light.....	25	24½	...
Norfolk & Ports. Traction Pfd.....	100	78	...
Seaboard Co. Common.....	100	27½	...
Seaboard Co. 1st Pfd.....	100	87½	...
Seaboard Co. 2d Pfd.....	100	60½	...
United Railways & Elec. Co.....	50	18¾	19
Virginia Ry. & Power Com.....	100	35¾	41
Virginia Ry. & Power Pfd.....	100	...	81

Bank Stocks.	Par.	Bid.	Asked
Bank of Baltimore.....	100	174½	...
Bank of Commerce.....	15	32	32½
Citizens'.....	10	42	...
Exchange.....	100	165	...
Farmers & Merchants.....	40	52½	53¼
First National.....	100	149	152
Howard.....	100	13½	15
Merchants.....	100	119	120
National City.....	100	125	145
Union.....	20	41½	42¼
Western.....	20	41½	42¼

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked
American Bonding.....	25	78½	...
Continental Trust.....	100	230	235
Fidelity & Deposit.....	50	152½	153
Maryland Trust.....	100	90	91
Maryland Trust Pfd.....	100	115	125
Maryland Casualty.....	25	90	95
Mercantile Trust & Deposit.....	50	148½	...
Union Trust.....	50	70	...
U. S. Fidelity & Guaranty.....	100	162	166

Miscellaneous Stocks.

Ala. Con. Coal & Iron Pfd.....	100	78	85
Con. Cotton Duck Common.....	50	3	...
Con. Cotton Duck Pfd.....	50	17	17½
Con. Gas, Elec. Lt. & P. Com.....	100	91½	92½
Con. Gas, Elec. Lt. & P. Pfd.....	100	99	99½
Consolidation Coal.....	100	104½	105½
G. B. S. Brewing Co.....	100	1½	1
Georges Creek Coal.....	100	3	...
Mer. & Miners' Trans. Co.....	100	70	75

Railroad Bonds.

Atlantic Coast 1st 4s.....	100	95¼	96
Atlantic Coast Conv. 1st 4s.....	100	100¼	101
At. Coast (Conn.) 4s, Cfs. 5-20s.....	100	93½	95
Atlantic Coast (Conn.) 5s, Cfs. 5-20s.....	100	104	...
Balto. & Annapolis S. L. 5s.....	100	70	...
Balto. & Harrisburg 5s.....	100	107½	...
Carolina Central 4s.....	100	92½	93¼
Coal & Coke Railway 5s.....	100	94	...
Coal & Iron Railway 5s.....	100	102	...
Florida Southern 4s.....	100	91¾	92¼
Georgia & Alabama 5s.....	100	105¾	106
Georgia & Florida 5s.....	100	77½	78½
Georgia, Car. & North. 1st 5s.....	100	105¾	106¼
Georgia Southern & Fla. 1st 5s.....	100	106¾	...
Macon, Dublin & Savannah 5s.....	100	97½	98¼
Potomac Valley 1st 5s.....	100	105	...
Savannah, Fla. & West. 5s.....	100	110½	112
Seaboard 4s, Stamped.....	100	87	87½
Seaboard Adjustment 5s.....	100	79½	79¾
Seaboard & Roanoke 6s.....	100	100	...
South Bound 5s.....	100	108½	...
Virginia Midland 4th 5s.....	100	104	...
Virginia Midland 5th 5s.....	100	106	...
Washington & Vandemere 4½s.....	100	95½	...
Western Maryland 4s.....	100	87¾	...
West Virginia Central 1st 6s.....	100	100¼	...

Street Railway Bonds.

Anacostia & Potomac 5s.....	100	101¼	...
Anacostia & Potomac 5s, Gtd.....	100	103	103¼
Atlanta Con. St. Railway 5s.....	100	105	...
Augusta Railway & Electric 5s.....	100	103½	103½
Baltimore City Passenger 5s.....	100	99½	100
Baltimore City Passenger 4½s.....	100	99½	100¼
Baltimore, Spt. Pt. & C. 4½s.....	100	96	97½
Baltimore Traction 1st 5s.....	100	107	107½
Baltimore Traction (N. B.) 5s.....	100	100¼	...
Charleston City Railway 5s.....	100	96	96½
Charleston Con. Electric 5s.....	100	96	98½
Citizens' Ry. L. & P. of N. N. 5s.....	100	75	...
City & Suburban 5s (Baltimore).....	100	105¼	105½
City & Suburban 5s (Wash.).....	100	102½	103
Fairmont & Clarksburg Trac. 5s.....	100	100½	101
Knoxville Traction 5s.....	100	104½	...
Lexington Railway 1st 5s.....	100	92	100
Maryland Electric Railways 5s.....	100	98½	99¼
Newport News & Old Point 5s.....	100	95¼	95½
Norfolk & Portsmouth Trac. 5s.....	100	88	88½
Norfolk Railway & Light 5s.....	100	99½	100
Norfolk Street Railway 5s.....	100	104½	105½
Norfolk & Atlantic Ter. 5s.....	100	94½	...
United Railways 1st 4s.....	100	85½	85¾
United Railways Income 4s.....	100	63¾	64
United Railways Funding 5s.....	100	87¼	87½
Virginia Electric Ry. & L. 5s.....	100	104½	105

Miscellaneous Bonds.

Ala. Con. Coal & Iron 5s.....	100	86½	87
Baltimore Brick 5s.....	100	82½	85
Baltimore Electric 5s, Stp.....	100	96	97
Consolidated Gas 5s.....	100	108¾	...
Consolidated Gas 4½s.....	100	97½	97¾
Con. Gas, Elec. Lt. & P. 4½s.....	100	90½	90¾
Con. Gas, Elec. Lt. & P. Notes.....	100	100¼	100
Fairmont Coal 1st 5s.....	100	97	97¼
G. B. S. Brewing 1st 4s.....	100	43	43¼
G. B. S. Brewing Income 5s.....	100	5	6
Maryland Steel Co. 5s.....	100	102	...
Mt. Vernon-Woodbury Cotton Duck 5s.....	100	76¼	76½
United Elec. Lt. & P. 4½s.....	100	93	94

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending June 17.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	75	...
Aiken Mfg. Co. (S. C.).....	80	...
American Spinning Co. (S. C.).....	160	...
Anderson Cotton Mills (S. C.).....	48	...
Anderson Cot. Mills (S. C.) Pfd.....	100	...
Arendale Mills (S. C.).....	98	...
Arkwright Cotton Mills (S. C.).....	99	100
Augusta Factory (Ga.).....	40	...
Avondale Mills (Ala.).....	116	...
Belton Mills (S. C.).....	130	138
Brandon Mills (S. C.).....	98	103
Brogan Mills (S. C.).....	90	...
Cannon Mfg. Co. (N. C.).....	135	...
Cabarrus Cotton Mills (N. C.).....	130	134
Chadwick Mfg. Co. (N. C.) Pfd.....	100	...
Chiquola Mfg. Co. (S. C.).....	170	...
Clifton Mfg. Co. (S. C.) Pfd.....	97	...
Columbia Cotton Mills (S. C.).....	120	...
Columbus Mfg. Co. (Ga.).....	98	...
Courtney Mfg. Co. (S. C.).....	100	...
Dallas Mfg. Co. (Ala.).....	99	...
Darlington Mfg. Co. (S. C.).....	80	...
D. E. Converse Co. (S. C.).....	90	...
Drayton Mills (S. C.).....	98	100
Eagle & Phenix Mills (Ga.).....	117	...
Easley Cotton Mills (S. C.).....	162	175
Enoree Mfg. Co. (S. C.).....	50	65
Enoree Mfg. Co. (S. C.) Pfd.....	96	100
Enterprise Mfg. Co. (Ga.).....	65	76
Exposition Cotton Mills (Ga.).....	200	...
Gaffney Mfg. Co. (S. C.).....	60	65
Gainesville Cotton Mills (Ga.).....	72	80
Glenwood Mills (S. C.) Cotton.....	130	150
Gluck Mills (S. C.).....	99	...
Granby Cot. Mills (S. C.) 1st Pfd.....	35	46
Granvilleville Mfg. Co. (S. C.).....	140	145
Greenwood Cotton Mills (S. C.).....	57	60
Grendel Mills (S. C.).....	90	100
Hartsville Cotton Mills (S. C.).....	160	175
Henrietta Mills (N. C.).....	160	175
King Mfg. Co. (S. C.).....	100	105
King Mfg. Co. (S. C.) Pfd.....	80	85
Lancaster Cotton Mills (S. C.).....	130	...
Lancaster Cot. Mills (S. C.) Pfd.....	97	100
Langley Mfg. Co. (S. C.).....	104	112
Laurens Mills (S. C.).....	127	136
Limestone Mills (S. C.).....	155	160
Lockhart Mills (S. C.).....	65	...
Lockhart Mills (S. C.) Pfd.....	90	100
Loray Cotton Mills (N. C.) Pfd.....	35	...
Marlboro Cotton Mills (S. C.).....	95	...
Mills Mfg. Co. (S. C.).....	102	...
Molokoh Mfg. Co. (S. C.).....	95	105
Monaghan Mills (S. C.).....	100	...
Monarch Cotton Mills (S. C.).....	105	...
Newberry Cotton Mills (S. C.).....	125	130
Ninety-Six Cotton Mills (S. C.).....	130	150
Norris Cotton Mills (S. C.).....	121	130
Olympia Cotton Mills (S. C.).....	90	...
Orr Cotton Mills (S. C.).....	92	95
Pacolet Mfg. Co. (S. C.).....	90	...
Pacolet Mfg. Co. (S. C.) Pfd.....	95	100
Parker Common.....	60	...

Parker Preferred.....	85
Pelzer Mfg. Co. (S. C.).....	163
Piedmont Mfg. Co. (S. C.).....	175
Poe Mfg. Co., F. W. (S. C.).....	110
Saxon Mills (S. C.).....	130
Sibley Mfg. Co. (Ga.).....	65
Spartan Mills (S. C.).....	130
Trion Mfg. Co. (Ga.).....	130
Tucapau Mills (S. C.).....	310
Union-Buffalo (S. C.) 1st Pfd.....	75
Union-Buffalo (S. C.) 2d Pfd.....	16
Victor Mfg. Co. (S. C.).....	110
Warren Mfg. Co. (S. C.).....	90
Warren Mfg. Co. (S. C.) Pfd.....	100
Washington Mills (Va.).....	20
Washington Mills (Va.) Pfd.....	106
Whitney Mfg. Co. (S. C.).....	110
Wiscasset Mills (N. C.).....	135
Woodruff Cotton Mills (S. C.).....	110
Woodside Cotton Mills (S. C.).....	95
Watts Mills (S. C.).....	80
Williamston Mills (S. C.).....	120

A Reference Book in Useful Form.

A special desk addition of the *American Bank Reporter*, dated June, 1911, has just been issued. It embodies in compact form a great fund of information concerning banks and bankers, and will be specially valuable to anyone wishing a reference book of that character, but of a size convenient to handle, as it can easily be carried in one's pocket or put in a pigeon-hole of a desk. It is neatly bound in red leather, with gold lettering, printed on good paper, and contains a list of all national, State, savings and private banks, trust companies and other financial institutions in the United States and Canada, arranged in alphabetical order by States, and showing officers, capital, surplus, undivided profits, deposits, loans, correspondents, etc. The book is published by the Steurer Publishing Co., successor to Stumpf & Steurer, 5 Beekman street, New York city.

FINANCIAL CORPORATIONS.

Ala., Demopolis.—Official: The Commercial National Bank chartered; capital \$100,000; A. R. Smith, president; Isidore Berry, vice-president; John D. Norwood, cashier; directors, J. H. Spight, L. L. Steinhart, C. C. Clay and Jesse B. Hearin. Business is to begin at once.

Ark., Arkadelphia.—The Merchants and Planters' Bank of Arkadelphia is reported chartered; capital \$100,000; R. A. Stewart is president; F. H. Adams, vice-president, and John N. Stewart, secretary and cashier.

Ark., Rison.—A new bank capitalized at \$25,000 is reported organized with A. B. Banks of Fordyce, president; I. E. Moore, vice-president; J. T. Renfrow, cashier, and J. B. Searcy, secretary. Business will begin in about 30 days.

Ark., Delight.—A new bank capitalized at \$25,000, is reported organized with directors thus: A. E. Westbrook, president; S. L. Blakely, vice-president; C. A. Kizina, cashier; C. E. Reid, secretary; J. F. Blakeley and A. B. Banks of Fordyce. Business is to begin in about thirty days.

Ark., De Witt.—The First National Bank of De Witt is reported being organized with \$25,000 capital by J. M. Thompson of De Witt, Ark.; J. W. Allen, W. J. Stillwell, W. H. Norsworthy and C. L. Morgan.

Ark., Fort Smith.—Official: The Guaranty Title & Abstract Co. of Fort Smith and Greenwood, Ark., succeeding the Guaranty Title & Trust Co., incorporated; capital \$15,000, with \$12,000 subscribed; surplus \$3000 treasury stock; directors, A. N. Sicard, president and treasurer, Fort Smith, Ark.; A. W. Estes, vice-president, Little Rock, and A. P. Strother, secretary, Fort Smith. Business began May 25.

Ark., Wilmot.—Reported that a new bank is being organized by A. L. Footen, L. W. Perdue, J. A. Burns, R. L. McDuffie, Mrs. A. E. Jackson and J. P. Blanks.

Fla., Hawthorne.—Official: A new bank capitalized at \$15,000 recently began business with A. L. Webb, president, and W. C. Mahin, cashier.

Ga., Dalton.—A new bank capitalized at \$50,000 is reported being organized by D. B. Barrett, manager and owner of the North Georgia Warehouse Co., and others.

Ga., Decatur.—Official: The DeKalb County Bank chartered; capital \$25,000. Business is to begin August 31. J. O. Norris of Stone Mountain, Ga., and others interested.

Ga., Dexter.—The Farmers' State Bank of Dexter is reported to have elected officers thus: F. M. Daniel, president; Jerome Kennedy, vice-president; directors, Jerome Kennedy, F. M. Daniel, H. I. King, John D. Wal-

ker, L. W. Wiggins, W. P. McClelland, Ernest Clarke, B. F. Wood, P. A. Ashley, C. T. Beacham, Sr., F. L. Hobbs.

Ga., Dublin.—Official: The Commercial Bank of Dublin chartered; capital \$25,000; J. M. Page, president; E. D. White, vice-president, and A. P. Hilton, cashier. Business is to begin about July 1.

Ga., Montrose.—The Bank of Montrose, capital \$25,000, is reported organized with directors thus: President, C. R. Williams; vice-president, W. G. Thompson and E. L. Wade, Joel A. Smith, H. E. Butler, H. C. Black, W. M. Allen and J. H. Rowland.

Ky., Louisville.—The Central National Life Insurance Co. is reported to have filed articles of incorporation; capital \$500,000. Incorporators: W. H. Gregory, John C. Lewis, A. F. Bolling and others of Louisville; Thomas H. Roger and A. J. Braud, Louisville; J. J. Perline, Maysville; J. L. Patterson, Paintsville; Frank R. Henderson and J. W. Mayo, Ashland, and others.

La., New Iberia.—Official: The Citizens' Bank of New Iberia chartered; capital \$50,000; business began June 5; officers, president, Felix Patout; vice-presidents, Edward Weeks and H. Patout; cashier, Charles L. Prevost; assistant cashier, Fred J. Patout.

Miss., Leland.—The Planters' Bank, capital \$50,000, is reported being organized; organizers, P. L. Mann, J. E. Branton and others.

Mo., Stoutland.—Reported chartered: The Bank of Stoutland; capital \$10,000. Among the stockholders are Fred L. Benage, R. G. Garmen, C. M. Jarrett, W. E. Rowden.

Okla., Coweta.—Official: The National Bank of Commerce, which is a conversion of a State institution, began business June 12; capital \$25,000. George Lewis, president; C. I. Peden, vice-president; E. E. Lewis, cashier; E. P. Hopping, assistant cashier.

Okla., Oklahoma City.—The Vendig Realty & Sureties Co. is reported chartered; capital \$5000; directors, Arthur J. Rosenfield, France F. Whitney and Herbert M. Vendig.

Okla., Oklahoma City.—Reported chartered: The State Building and Loan Association; capital \$250,000; directors, Scott Braden, A. C. Farmer and Ed. L. Klein.

Okla., Tyrone.—The First National Bank of Tyrone is reported chartered; capital \$25,000; W. N. Wright, president; E. O. Love, vice-president; G. S. Speakman, cashier; P. Speakman, assistant cashier.

S. C., Eutawville.—The Bank of Eutawville is reported to have been granted a commission; capital \$25,000. E. H. Pringle and Hyman Pearlstone of Charleston, petitioners.

Tenn., Riceville.—The Riceville Bank of McMinn county is reported chartered; capital \$10,000; incorporators, J. L. Ware, S. T. Porter, C. W. Olephant, W. P. McKinney and J. W. Brown.

Tex., Fort Davis.—The Fort Davis State Bank is reported organized by George W. Gleim.

Tex., Port O'Connor.—Official: The Farmers' Bank, unincorporated, began business June 1; C. S. E. Holland and P. R. Austin, owners; C. S. E. Holland, manager, and O. L. Crouch, cashier.

Tex., Houston.—The American Trust Co., capital \$500,000, has organized with directors thus: John H. Kirby, president of the Kirby Lumber Co.; R. G. Duff, E. W. Brown, Orange, Tex.; Dr. W. M. Brumby, R. B. Creager, Brownsville; W. L. Hill, Huntsville; J. D. Hedley, Cameron; J. C. Tanberg, Eau Claire, Wis.; E. C. Noble, L. P. Altmar, president of the First National Bank, Groveton, and Monta J. Moore, Houston.

Tex., Long Branch.—The First Guaranty State Bank of Long Branch, incorporated, is reported chartered; capital \$10,000. Incorporators: G. R. Thompson, J. A. Hughes, R. R. Rettig and others.

Tex., Tyler.—Official: The Jester Guaranty State Bank chartered; capital \$50,000; incorporators, L. L. Jester, J. H. Herndon, M. N. Davidson, R. E. Gaston and H. W. Jester. Business began June 15. This succeeds the Jester National Bank.

Tex., Trinity.—The Trinity National Bank, capital \$30,000, is reported organized with F. L. Barnes, president; directors, W. A. Bell, John B. Peyton, S. E. Barnes, J. H. Dunlap, C. J. Rogan, J. B. Gibson, J. A. Elkins, J. C. Mansell, W. T. Bruton, G. R. Barnes.

Va., Newport News.—Official: The Colonial State Bank chartered and incorporated to take over the banking department of the Powell Trust Co.; capital, minimum \$50,000; maximum \$100,000; surplus \$15,000. A. L. Powell, president; W. Lee Powell, vice-president; J. E. T. Hunter, cashier; F. R. Barthete, assistant cashier; directors, A. L. Powell, J. E. T. Hunter, J. H. Graves, W.

Lee Powell, C. K. Weaver and Harry Reyner. Business is to begin about July 1.

W. Va., Weirton.—The Bank of Weirton, capital \$35,000, is reported incorporated by D. M. Weir, Everett and Nelson D. Miller of Steubenville, O.; C. Ferguson of Holliday's Cove and E. F. Weir of Weirton, W. Va.

NEW SECURITIES.

Ala., Evergreen.—Dispatches state that \$100,000 of Conecuh county bonds have been declared valid by the Alabama Supreme Court.

Ala., Flomaton.—A. L. Brazil, principal, is reported receiving bids for \$6000 of 5 per cent. 20-year school-building bonds.

Ala., Hartsells.—Arrangements are reported being made to sell water-works bonds. Address Town Council.

Ala., Huntsville.—Official: Bids will be received until 8 P. M. July 4 by R. E. Smith, Mayor, for \$100,000 of 5 per cent. 20-30-year city hall and public office building bonds; denomination \$100; dated September 1, 1911.

Ala., Huntsville.—Bids will be received by W. B. Lawler, Judge of Probate of Madison County, until July 10 for \$50,000 of 4½ per cent. 18-28-year county bonds.

Ala., Moulton.—Reported that an election will probably be held within 30 days to vote on \$250,000 of Lawrence county road bonds.

Ala., New Decatur.—An ordinance is reported to have been introduced in the City Council providing for an election July 11 to vote on \$20,000 of school bonds.

Ark., Parkin.—Official: Bids will be received until June 29 by J. L. Entekin, secretary School Board, for \$18,000 of 6 per cent. bonds; denomination \$1500.

Fla., Key West.—The Island City National Bank has been awarded an issue of paving bonds.

Fla., Palatka.—Notice is given that an election is to be held July 11 to vote on \$15,000 of 5 per cent. street paving bonds. Howell A. Davis is Mayor and A. T. Triay, clerk.

Fla., St. Petersburg.—Official: Voted June 13; \$100,000 of bonds as follows: Street paving, \$35,000; crosswalk, \$5000; water-works extension, \$5000; water-front, \$35,000; sewers, \$5000; Lake Park, \$15,000. W. F. Divine is City Clerk.

Ga., Albany.—Reported voted: \$100,000 of gas plant, park, cemetery and other improvement bonds.

Ga., Athens.—Official: July 11 an election is to be held to vote on \$200,000 of 5 per cent. Clarke county courthouse, jailer's house and jail bonds; denomination \$1000; dated January 1, 1912; maturity December 31, 1911. Address Tate Williams.

Ga., Atlanta.—Official: Well, Roth & Co., Cincinnati, O.; Curtis & Sanger, Boston, Mass.; Provident Savings Bank & Trust Co., Cincinnati, O., and Georgia Mortgage & Trust Co., Atlanta, purchased on June 6 \$840,000 of the \$1,200,000 of 4½ per cent. water, school and sewer bonds for par plus \$12,795 premium, or \$101,523; denomination \$1000. Bids for the remaining \$450,000 of sewer bonds were rejected and reserved for future sale. Courtland S. Winn is Mayor and John W. Grant chairman finance committee.

Ga., Cuthbert.—Bids were received until 8 P. M. June 21 by the City Council, Robert L. Moye, Mayor, for \$20,000 of 5 per cent. 30-year improvement bonds.

Ga., Colquitt.—J. H. Hillsman & Co. of Atlanta are reported to have purchased \$22,000 of 5 per cent 30-year water, light and school bonds.

Ga., Jesup.—Official: Voted June 17: \$25,000 of 5 per cent. 30-year water-works bonds; denomination \$1000; dated December 1, 1911; maturity December 1, 1911. Bids are to be asked as soon as bonds are validated.

Ga., Moultrie.—The question of issuing \$300,000 of Colquitt county jail, bridge and road bonds is reported under consideration.

Ga., Oglethorpe.—An election is to be held in Macon county, July 20. It is reported, to vote on \$50,000 of road bonds. A. H. Perry is clerk, County Commissioners.

Ga., Oglethorpe.—Official: Bids will be received until June 26 by J. P. Nelson, Mayor, for \$18,000 of 5 per cent. 30-year sewerage and light bonds; denomination \$600; dated June 26, 1911. C. A. Powell is Clerk.

Ga., Perry.—July 1, it is reported, an election is to be held to vote on \$6000 of 5 per cent. 10-year electric-light bonds.

Ga., Roberta.—J. L. Fogg, Barnesville, Ga., is reported to have been awarded at \$9 premium \$5000 of 5 per cent. 30-year school bonds. Hoy Dent is City Clerk.

Ga., Washington.—Notice is given that an election to vote on \$30,000 of 5 per cent. electric-light plant bonds will be held July 14. E. A. Barnett is Mayor and Boyce Ficklen, Jr., Clerk.

Ga., Unadilla.—Reported voted: \$15,500 of sewerage and \$12,500 of water-works bonds. D. S. Ivey is Mayor.

Ga., Winder.—Reported voted: \$21,500 of sewer bonds.

Ky., West Covington, P. O. Covington.—The Provident Savings Bank & Trust Co. of Cincinnati is reported to have been awarded at \$199.64 premium \$9200 of 5 per cent. water-works bonds. R. L. Kennedy is City Clerk.

Ky., Louisville.—Bids will be received until noon July 10 for 4½ per cent. bonds to refund and pay off the principal of \$300,000 of bonds known as Old Reliability bonds. James B. Brown is president and J. M. Terry secretary-treasurer Commissioners of the Sinking Fund.

La., Abbeville.—Reported voted: \$30,000 of bonds of Bayou Tigre drainage district.

La., Coushatta.—Dispatches say that all bids received for the \$25,000 of school bonds were rejected and that new bids will be asked.

La., Donaldsonville.—June 24, it is reported, an election will be held to vote on \$14,000 of 5 per cent. 20-year bonds of Ascension parish school district No. 1.

La., Kentwood.—Press dispatches state that a petition is being circulated requesting the Town Council to call an election to vote on \$50,000 of water-works and sewerage bonds.

La., Shreveport.—An ordinance is reported to have been adopted authorizing the sale of \$250,000 of public-improvement bonds to the Commercial National Bank at about \$10,000 premium.

Md., Easton.—Official: The United States Fidelity & Guaranty Co. of Baltimore recently purchased \$8000 of 4 per cent. Talbot county bridge bonds.

Miss., Amory.—Dispatches state that all bids received June 6 for the \$65,000 of 5½ per cent. water-works and sewer bonds were rejected and that new bids will be received until 8 P. M. July 4; denomination \$50. J. A. Mayfield is Mayor.

Miss., Ellisville.—Notice is given that an election is to be held July 4 to vote on \$10,000 of school bonds. H. P. Gough is Clerk.

Miss., Jackson.—Official: Steps have been taken to float \$150,000 of bonds; \$65,000 for schools and \$85,000 for street improvements. A. C. Crowder is Mayor.

Miss., Lexington.—Official: The Mayor and Board of Aldermen have ordered the issuing of \$62,500 of water-works and sewer bonds.

Miss., Mahan.—The Bank of West Point is reported to have purchased \$10,000 of 6 per cent. school-building bonds. Geo. W. Cooke is Mayor.

Miss., McComb City.—Reported that \$15,000 of 5 per cent. 20-year water-works bonds have been sold to McColgan Bros. of McComb City. J. Dock Harrell is City Clerk.

Miss., Wiggins.—Official: Street-improvement bonds to the amount of \$5000 will likely be floated during July. A. W. Bond is Town Clerk.

Mo., Belton.—Reported voted: \$10,000 of street paving bonds.

Mo., Carrollton.—Reported voted: \$7500 of school district building bonds.

Mo., Liberty.—Concerning the report that road bonds are to be voted, an official letter says that Excelsior Springs special road district, Clay county, has not been organized, but will be voted on July 29. The amount of bonds to be issued will depend on the Commissioners, provided the issue is not defeated. T. C. Stean is County Clerk.

Mo., Springfield.—Bids will be received until noon July 11 by W. B. Claud, County Clerk, for \$150,000 of 4½ per cent. courthouse bonds.

Mo., Maryville.—Reported defeated: \$15,000 of city hall bonds.

N. C., Concord.—Cabarrus county is, according to press dispatches, offering for sale \$105,000 of 4½ per cent. 30-year funding bonds.

N. C., Hot Springs.—Reported that \$20,000 of 6 per cent. 30-year improvement bonds have been sold.

N. C., Lillington.—The election to vote on \$100,000 of Harnett county good-roads bonds will, it is stated, be held July 29.

N. C., Wendell.—The First National Bank of Columbus, O., is reported to have been

[For Additional Financial News, See Page 78.]

The Merchants National Bank

Established 1835
South and Water Sts., BALTIMORE, MD.
DOUGLAS H. THOMAS, President.
WM. INGLE, Vice-Pres. and Cashier.
J. C. WANDS, Asst. Cashier.
JOHN B. H. DUNN, Asst. Cashier.
Capital \$1,500,000
Surplus and Profits \$900,000
Deposits \$12,000,000
Accounts of Banks, Bankers, Corporations and Individuals solicited. We invite correspondence.

THE FIRST NATIONAL BANK OF KEY WEST, FLA.

United States Depository and Disbursing Agent.
Capital \$100,000
Surplus and Undivided Profits \$40,000
A general banking business transacted. Special attention given to collections.

MANUFACTURERS and JOBBERS
Frequently find it necessary to have BANKING FACILITIES in addition to those offered by local banks.

FIRST NATIONAL BANK OF RICHMOND, VA.
With assets of nine million dollars, offers just the additional facilities required.
Jno. B. Purcell, President.
Jno. M. Miller, Jr., Vice-Pres. & Cashier.

INVESTMENT SECURITIES

Southern Stocks and Bonds
Municipal and Corporation
Cotton Mill Stock a Specialty
WM. S. GLENN, Broker - SPARTANBURG, S. C.

Delaware Trust Company

WILMINGTON, DELAWARE
INCORPORATING under broad, liberal, safe and stable Delaware laws. A fully equipped department for proper organization and registration of corporations.
BANKING AND TRUST department gives special attention to out of town customers' accounts.
TITLE DEPARTMENT examines and guarantees title to realty throughout Delaware.
REALTY DEPARTMENT has sites for manufacturing industries. Modern methods of management of property.
EDWARD T. CANBY, President.
J. ERNEST SMITH, V.-Pres. and Gen. Counsel.
WM. G. TAYLOR, Treasurer.
HARRY W. DAVIS, Secretary.
W.W. PUSEY, 2d Title and Real Estate Officer.

H. B. Wilcox, President. Jos. R. Foard, V.-Pres.
Wm. S. Hammond, Cash. Saml. W. Tichudi, A. Cash.
R. E. Bolling, A. Cash. Raymond B. Cox, Auditor.

The First National Bank

17 South St., Baltimore, Md.
Capital \$1,000,000
Surplus and Net Profits \$500,000
Resources \$9,000,000
Especially well equipped to handle the business of Southern Manufacturers, Corporations and Individuals. We invite a call or correspondence.
1863-48 Years of Success-1911

The National Exchange Bank

OF BALTIMORE, MD.
Hopkins Place, German and Liberty Sts.
Capital \$1,000,000
July 15, 1908, Surplus and Profits \$671,631.60
OFFICERS:
WALDO NEWCOMER, President.
SUMMERFIELD BALDWIN, Vice-Pres.
R. VINTON LANSDALE, Cashier.
C. G. MORGAN, Asst. Cashier.
Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals Invited.

JOHN NUVEEN & CO.

1st Nat. Bank Bldg., CHICAGO
We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.
Write us if you have bonds for sale.

FLORIDA TRUST CO.

JACKSONVILLE, FLA.
Authorized Capital, \$600,000
Mortgages, Real Estate and Securities Bought and Sold
Acts as Guarantors, Trustees, Executors, etc.

Southern Steam Railroad Securities

DEALT IN
F. J. LISMAN & CO.
Specialists in Steam R. R. Securities
Members New York Stock Exchange,
30 Broad Street NEW YORK
39 Pearl Street, Hartford.
Land Title & Trust Bldg., Philadelphia.

CAPITAL AND SURPLUS \$3,500,000 THE BALTIMORE TRUST CO. BALTIMORE, MD.

Solicits Accounts of Banks, Bankers, Corporations, and Individuals
Interest Allowed on Deposits Subject to Check.
Special Rates Made on Time Deposits.
OFFICERS
THOMAS H. BOWLES, President DOUGLAS H. GORDON, First V.-Pres.
G. C. MORRISON, Second V.-Pres. SAMUEL C. ROWLAND, Third V.-Pres.
C. D. FENHAGEN, Secretary-Treasurer

EVERY business man should know just what it costs to run his business. Should know the cost and profit of each department. Many do not, but those who do, know that it pays. It is our business to devise accounting and cost systems for any kind of business—manufacturing, mercantile, commission, etc., and to come around periodically and see that things are going right. Let us look into your situation. Maybe we can suggest some desirable improvements.

INTERSTATE AUDIT CO., 729 15th St. N. W., WASHINGTON, D. C.

CHARLES L. HEHL, C. P. A., President ELMER L. HATTER, C. P. A., Treasurer
JOHN KÜCHLER, C. P. A., Vice-President ERNEST E. WOODEN, C. P. A., Secretary

BALTIMORE AUDIT COMPANY

1027-1033 Calvert Building BALTIMORE, MD.
BRANCH—Monticello Arcade Building, Norfolk, Va.

CRUSSELLE AUDIT CO.

(INCORPORATED)
ACCOUNTANTS AUDITORS
SYSTEMATIZERS
1006 Candler Bldg. ATLANTA, GEORGIA
All audits conducted by or under direct supervision of members of the company.

PUBLIC ACCOUNTANTS

The South-Eastern Audit Co.
COLUMBIA, S. C.

CHARLES NEVILLE
Accountant and Auditor
BUSINESS SYSTEMS
212-213 National Bank Building
SAVANNAH, GA.
Long Distance Phone
References—Any Bank in Savannah

GO SOUTH!

Real Estate, Timber, Phosphate, Coal, Iron, Farm, Ranch, and Other Properties and Investments in Southern States and Mexico, correspond with
SOUTHERN STATES DEVELOPMENT CO.
GEO. B. EDWARDS, President.
Tribune Bldg., 154 Nassau St., New York, N. Y.
Connections in the Principal Cities of Europe.

SURETY BONDS

Fidelity and Deposit Co.

OF MARYLAND
Home Office, BALTIMORE, MD.
Assets Over \$5,000,000

Pioneer Surety Co. of the South.
Becomes Surety on bonds of every description.
AGENTS IN ALL PRINCIPAL CITIES
HARRY NICODEMUS, EDWIN WARFIELD,
Sec'y and Treas. President.

Established 1878.

JOHN C. SHORT & SON

Investment Brokers
AND
Financial Agents
51 Liberty Street NEW YORK

Investment securities bought, sold or exchanged for other securities. Loans procured for Railroad, Industrial and other corporations. Special attention given to securities issued for development or extension purposes in the South.

"AMERICAN"

FOR LONG DRIVES

INDOORS OR OUTDOORS

MANILA ROPE TRANSMISSION

has demonstrated its superiority over other methods of power distribution in that it is

Low in first cost and maintenance.
High in efficiency.
Positive and steady in operation.
Noiseless while running.
Unlimited in amount of power that may be transmitted.

All the essential qualities of a rope for driving purposes are combined in



An outdoor drive between buildings, 106 feet between centers "American System"

"AMERICAN" TRANSMISSION ROPE

It is weatherproof and is not affected by exposure to heat, cold or moisture. It requires no external dressing of any kind, as it is self-lubricating and stretched in process of manufacture.

We also manufacture Manila, Sisal and Jute Rope, Bale, Hay and Hide Rope, Lath, Yarn and all kinds of Bundling Strings.

Write for samples, prices and "The Blue Book of Rope Transmission"

American Manufacturing Co.

Largest Workers of Fibre in the World
63-65 Wall Street New York City

TRANSMISSION ROPE

Municipal — Railroad — Public Utility BONDS

Purchased in entire issues direct from Municipalities and Corporations. Circulars describing sound bonds which we have investigated and recommend for investment mailed to investors upon request.

Correspondence invited.

N. W. Halsey & Co., Bankers

49 Wall Street, New York

PHILADELPHIA

CHICAGO

SAN FRANCISCO

ADDITIONAL CAPITAL FOR DEVELOPMENT OF YOUR BUSINESS.

We will promptly consider applications from progressive, well established industries, steam and electric railways and public service corporations.

Our institution has

THE LARGEST BANKING CAPITAL IN THE SOUTHERN STATES, and during 27 years' direct Southern affiliation has been actively engaged in promoting Southern enterprises.

ENTIRE ISSUES OF BONDS PURCHASED. MERGERS FINANCED.

INTEREST PAID ON DEPOSIT ACCOUNTS

Correspondence Invited.

Mercantile Trust and Deposit Company

OF BALTIMORE
Established 1884. Capital and Surplus, \$4,500,000

A. H. S. POST, President

awarded, at \$28 premium, \$10,000 of school bonds.

N. C., Wilmington.—Bids will be received until 3 P. M. July 3 for \$50,000 of 4½ per cent. 25-year New Hanover county road and bridge bonds. D. McEachern is chairman Board of County Commissioners.

Okl., Chickasha.—A special election will probably be held in July to vote on \$25,000 of bonds for establishing park and boulevard system in Chickasha.

Okl., Comanche.—Bids will be received until June 26, it is reported, for \$15,000 of 6 per cent. 20-year water and light bonds. Address Roy J. Minton, City Clerk.

Okl., Dewey.—Official: All bids received June 15 for the \$40,000 of 6 per cent. 25-year water-works plant bonds were rejected; denomination \$1000; dated July 1, 1911; maturity July 1, 1935. J. W. Green is Clerk.

Okl., Oklahoma City.—M. L. Turner, president of the Western National Bank, is reported to have purchased at \$491.51 premium \$255,000 of school bonds. Gus A. Elbow is secretary of the board.

Okl., Sapulpa.—June 28, it is reported, an election is to be held to vote on \$75,000 of water-works bonds.

Okl., Tecumseh.—A. J. McMahon of Oklahoma City, according to press dispatches, has purchased \$50,000 of 5½ per cent. 20-year Pottawatomie county refunding bonds. J. L. Cotten is County Commissioner.

Okl., Weleetka.—Reported that the Board of Trustees will receive bids until noon July 1 for \$10,500 of 20-year electric-light and \$32,000 of 25-year water-works 6 per cent. bonds. W. M. Bell is chairman Light and Water Commission. E. M. Kennedy is Town Clerk.

S. C., Columbia.—Official: Townsend Scott & Son of Baltimore have purchased \$75,000 of bridge bonds.

S. C., Honea Path.—Bids will be received until noon June 26 for \$7000 of 5 per cent. 20-year bonds of school district No. 34. J. F. Monroe is secretary board of trustees.

S. C., Marion.—Reported that all bids received May 25 for \$20,000 of High-school District No. 1 and \$30,000 of School District No. 36 40-year 5 per cent. bonds were rejected.

S. C., Sumter.—Official: An election is to be held the first Tuesday in August to vote on \$150,000 of 20-year Sumter county road-improvement bonds. J. R. Sumter is County Clerk and P. M. Pitts County Supervisor.

S. C., Timmonsville.—Reported that \$35,000 of 5 per cent. 20-40-year water and drainage bonds have been sold.

Tenn., Brownsville.—Official: Voted: \$40,000 of 5 per cent. 30-year street-improvement bonds. Bids for same are now being asked. John O. Bomer is Mayor.

Tenn., Chattanooga.—Bids will be received until 3 P. M. July 12 for \$45,000 of 4½ per cent. paving bonds; denomination \$1000; dated January 1, 1911. Address T. C. Thompson, Mayor.

Tenn., Memphis.—The Bank of Commerce & Trust Co. is reported to have been awarded \$200,000 of 4½ per cent. 30-year Shelby county school bonds at \$203.650.

Tenn., Humboldt.—Official: June 14 city voted \$12,000 of 5½ per cent. 30-year bonds to bond city's floating indebtedness. C. W. Rooks is Mayor.

Tenn., Kingston.—D. H. Evans, County Clerk, will, it is reported, receive bids until noon July 3 for \$45,000 of 5 per cent. Roane county improvement bonds; denomination \$500.

Tex., Aspermont.—Official: Bids will be received until noon July 1 for \$50,000 of 5 per cent. 10-40-year Stonewall county courthouse bonds; dated May 11, 1911. R. S. Tillotson is Clerk County Court.

Tex., Austin.—The Attorney-General has approved the following securities: \$6000 of 5 per cent. 10-40-year Greenville water-works bonds, \$7000 of water-works and \$12,000 of street-improvement 5 per cent. 10-40-year bonds, \$25,000 of 6 per cent. 20-40-year Hearne water-works bonds, \$20,000 of 20-40-year Gorman independent school district bonds, \$6000 of water-works bonds of Caldwell.

Tex., Brock.—Reported voted: \$2000 of school bonds. Address T. P. Everett, County Superintendent, at Weatherford, Tex.

Tex., Corpus Christi.—Official: Seasongood & Mayer, Cincinnati, O., purchased on June 9 the \$50,000 of 5 per cent. 40-year municipal wharf bonds; denomination \$1000; dated May 1, 1911. Clarke Pease is Mayor and Thomas B. Dunn, secretary.

Tex., Dallas.—Dispatches state that bids will soon be asked by W. Henderson, Finance Commissioner, for \$250,000 of 4 per cent. 1-40-year school-improvement bonds; denomination \$1000.

Tex., Galveston.—The sale of \$26,000 additional bonds of drainage district No. 1, according to press dispatches, to J. C. Kelso, contractor for the drainage, has been approved.

Tex., Hearne.—Official: Bids will be received until 5 P. M. July 10 by P. L. Brady, Mayor, for \$25,000 of 5 per cent. 40-year water and light bonds.

Tex., Knox City.—The State school fund is reported to have been awarded \$1000 of 5 per cent. 40-year bonds at par and interest.

Tex., Kovar.—Reported voted: \$1000 of school-improvement bonds of common school district No. 28, Bastrop county, known as the Kovar district.

Tex., Memphis.—Official: John D. Bird, County Judge, is offering at private sale \$25,000 of 5 per cent. road district No. 1 and \$40,000 of 5½ per cent. road district No. 2 20-40-year Hall county bonds; denomination \$1000; dated August 1. Bonds are in hands of Attorney-General for his approval.

Tex., New Braunfels.—July 11, it is reported, an election is to be held to vote on \$67,000 of water bonds. C. A. Jahn is Mayor.

Tex., Orange.—Reported voted: \$43,000 of bonds for completion of the Sabine-Neches Canal.

Tex., Palacios.—Reported voted: Water-works bonds.

Tex., Rock Island.—Bids will be received until 4 P. M. June 24 by J. W. Simmons, secretary Board of Trustees, for \$10,000 of 5 per cent. 5-40-year bonds of Rock Island Independent School District No. 33.

Tex., Waco.—Official: Bids will be opened July 10 for \$100,000 of 5 per cent. 10-40-year McLennan county bonds, voted May 27, for building and maintaining public roads; dated July 10, 1911; denomination \$1000. Address Hon. Tom L. McCullough, County Judge.

Tex., Westhoff.—Reported voted: \$5000 of school bonds.

Tex., Winnsboro.—Official: Voted May 6: \$16,000 of 5 per cent. 20-40-year independent school district bonds. R. B. Howell is president of the board.

Va., Boydton.—Five districts of Mecklenburg county have, it is reported, voted to issue road bonds.

Va., Christiansburg.—Ulen & Co. of Chicago are reported to have purchased \$40,000 of 5 per cent. 15-30-year water bonds.

Va., Fairfield.—June 20, it is reported, an election is to be held to vote on school bonds for Fairfield District, Henrico county. A. D. Wright is superintendent of county schools at Richmond.

Va., Farmville.—Official: Bids will be received until noon June 24 by Joseph E. Garland, clerk, for \$65,000 of 5 per cent. 20-year water-works bonds; denomination \$500; dated July 1, 1911.

Va., Luray.—Official: The First National Bank of Port Allegheny, Pa., purchased at par \$10,000 of 4½ per cent. 10-year bonds for additional water supply; denomination \$500; dated June 1, 1911. Richard Berry is Mayor.

Va., Rocky Mount.—Official: Voted June 14: \$50,000 of 5½ per cent. 20-40-year water, light and sewerage bonds; denomination \$500; dated July 1, 1911; maturity: \$15,000 on July 1, 1931; \$15,000 on July 1, 1936, and \$20,000 on July 1, 1941. C. S. Greer is Mayor.

Va., Suffolk.—The Supervisors of Sleepy Hole school district, Nansemond county, have, according to press dispatches, approved \$16,000 of bonds.

W. Va., Logan.—Reported voted: \$10,000 of 5 per cent. street-extension bonds.

W. Va., Princeton.—Bids will be received until noon June 30 by Charles B. Hedrick, secretary Board of Education, for \$50,000 of 6 per cent. 15-year high-school bonds of East River school district, Mercer county; denomination \$1000; dated June 30, 1911.

At Huntsville, Ala., bids will be received until 8 P. M. July 4 for \$100,000 of 5 per cent. 20-30-year bonds for erection of city hall and public offices. Further particulars will be found in the advertising columns.

At Huntington, W. Va., bids will be received until July 11, inclusive, for \$300,000 of 4½ per cent. 20-30-year Cabell county road-improvement bonds. Further particulars will be found in the advertising columns.

At Hearne, Tex., bids will be received until 5 P. M. July 10 for \$25,000 of 5 per cent. 40-year water and light bonds. Further particulars will be found in the advertising columns.

FINANCIAL NOTES.

The Bank of Colbert at Colbert, Ga., will, it is reported, increase its capital to \$25,000.

The Bank of Milledgeville at Milledgeville, Ga., is reported to have increased its capital from \$25,000 to \$50,000.

The annual meeting of the American Bankers' Association will be held in New Orleans, La., November 21, 22, 23 and 24.

The Security Title Co. of Nashville, Tenn., has, according to press dispatches, acquired the assets of the Nashville Title Co.

The Pensacola Home and Savings Association, Pensacola, Fla., has, it is reported, decided to increase its capital to \$2,000,000.

The Oil Field Bank of Griffithsville, W. Va., has, according to press dispatches, been converted into the Oil Field National Bank; capital \$25,000.

The Virginia-Carolina Chemical Co. has declared a quarterly dividend of 2 per cent. on its preferred stock, payable July 15, 1911. S. W. Travers is treasurer.

The Bank of Dublin, Inc., Dublin, Va., is reported to have amended its charter, increasing its capital from \$25,000 to \$40,000 maximum, and \$10,000 to \$15,000 minimum.

The capital of Dallas Trust and Savings Bank of Dallas, Tex., is to be increased from \$200,000 to \$300,000, and the capital of the Title & Guaranty Co. from \$100,000 to \$200,000.

The Lindsay National Bank and the German-American State Bank, both at Gainesville, Tex., according to press dispatches, have consolidated under the name of former institution; capital \$250,000.

At the annual convention of the Virginia Bankers' Association, held at Hot Springs June 15-17, the following officers were elected for the ensuing year: E. P. Miller of Lynchburg, president; Julien P. Hill of Richmond, treasurer, and George Bryan, attorney; Walter Scott of Farmville, secretary; vice-presidents, W. B. Vest of Newport News, V. Valden of Farmville, C. E. Tiffany of Warrenton; J. W. Bell of Abingdon and W. M. Godwin of Norfolk, Arthur Lee of Newport News, J. M. Hurt of Blackstone and B. V. Booth of Danville.

OFFICE OF VIRGINIA-CAROLINA CHEMICAL COMPANY.
Richmond, Va., June 13, 1911.
DIVIDEND NO. 63.

The Board of Directors have this day declared a dividend of TWO (2%) PER CENT., the same being consecutive quarterly dividend No. 63 on the Preferred Stock of this Company, payable July 15, 1911, when checks will be mailed to all preferred stockholders of record at the close of business on June 17, 1911; and for the purpose of this dividend and the stockholders' annual meeting both the preferred and common stock books of this Company will be closed from 12 noon June 17, 1911, to 10 A. M. July 20, 1911.

S. W. TRAVERS, Treasurer.



THE COAST LINE TO MACKINAC

DETROIT CLEVELAND BUFFALO NIAGARA FALLS TOLEDO PT. HURON GODERICH ALPENA ST. IGNACE

THE LUXURY OF A LAKE TRIP

Where will you spend your summer vacation? Why not enjoy the charms of our Inland Seas, the most pleasant and economical outing in America?

Where You Can Go

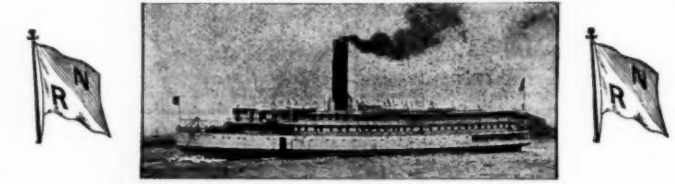
Daily service is operated between Detroit and Cleveland, Detroit and Buffalo; four trips weekly between Toledo, Detroit, Mackinac Island and way ports; three trips weekly between Toledo, Cleveland and Put-in-Bay.

A Cleveland to Mackinac special steamer will be operated two trips weekly from June 15th to September 10th, stopping only at Detroit every trip and Goderich, Ont., every other trip.

Special Day Trips Between Detroit and Cleveland, During July and August

Send 2 cent stamp for illustrated Pamphlet and Great Lakes Map.

Address: L. G. Lewis, G. P. A. Detroit, Michigan
Philip H. McMillan, President
A. A. Schantz, General Manager
Detroit & Cleveland Nav. Co.



When Going from Baltimore to Norfolk

you naturally want to use the safest, speediest, most modernly appointed steamers—the ones furnished like up-to-date, luxurious homes. If so,

USE THE CHESAPEAKE LINE

Two new queens of the Chesapeake, the City of Baltimore and the City of Norfolk, every day, including Sunday, between Baltimore and Norfolk, stop at Old Point Comfort en route, connecting with rail lines for all Southern points. Running water and intercommunicating telephones in each room. State-rooms equipped with shower baths and others connecting with baths. Wireless telegraph aboard. Cuisine unsurpassed. No trouble spared for passengers' comfort.

YORK RIVER LINE three times a week for York River landings, West Point and Richmond.

Chesapeake Steamship Co. GENERAL OFFICES Baltimore, Md.



ABSOLUTE SAFETY

is what you are looking for, and that is what we offer.

This bank has been in existence since 1869, and has grown to its present strength by conservative and able management.

We guarantee you absolute safety of your principal, and will pay you 3½% compounded quarterly in our Savings Department, and 4% on certificates of deposit, payable quarterly.

Write for our literature.

The Savannah Bank & Trust Company

SAVANNAH, GEORGIA

Capital and Surplus - - - \$1,200,000

OFFICERS

WM. F. McCauley, President.
CHAS. G. BELL, Vice-President.
Cashier—SAM'L L. CLAY.
Asst. Cashier—M. D. PAPY.

DIRECTORS

W. F. McCauley, Geo. P. Walker, J. Ward Motte,
Chas. G. Bell, A. F. Churchill, G. A. Mercer,
Wm. N. Pearce, H. D. Weed, John Malloch,
Gordon Saussy, Albert Wyly, W. L. Clay.